The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 816.—Vol. XXI.] LONDON, SATURDAY, APRIL 12, 1851. [Price 6d.

Stannaries of Cornwall—In the Vice-Warden's Court.

JONES *v.* GYTE.

IN RE ROCKS AND TREVERBYN UNITED TIN MINES.

NOTICE IS HEREBY GIVEN, that, pursuant to an Order, or Decree, made in this cause, and bearing date the 10th day of February last, a PUBLIC AUCTION will be HOLDEN at Gillis's Globe Hotel, ST. AUSTELL, on Saturday, the 19th day of April inst., at Three o'clock in the afternoon, for SELLING, either together or in separate lots, as may be then arranged, TWENTY (5000ths) PARTS, or SHARES, of the said Defendant of and in the SAID MINES, or a sufficient number to satisfy the Decree in this cause; and the LIKE PARTS, or SHARES, of and in the ORES, HALVANS, MACHINERY, MATERIALS, and OTHER EFFECTS upon and belonging to the SAID MINES. 1

For further information application may be made to Mr. Wm. Slater, solicitor, No. 90, Mosley-street, Manchester; or to Mr. Roberts, solicitor, Truro.

Registrar's Office, Truro, April 2, 1851.

Contract for Coals—Consulate-General of France.

NOTICE IS HEREBY GIVEN, that SEVEN MILLIONS NINE HUNDRED THOUSAND KILOGRAMMES of COALS being required by the GENERAL POST-OFFICE OF FRANCE, SEALED TENDERS for CONTRACT will be publicly RECEIVED at the COUNCIL HALL, General Post-office, Paris, on the 16th of April, 1851, at Two o'clock in the afternoon. 2

The schedule of particulars to be seen at the French Consul-General's Office, 47, King William-street, City, from Twelve to Four o'clock.

DEAN FOREST.

VALUABLE COAL and IRON-WORKS, with suitable MACHINERY and APPURTENANCES, affording an opportunity seldom offered for acquiring a lucrative concern.

MESSRS. ADAM MURRAY AND SON will SELL, BY AUCTION, at Garraway's, on Monday, the 2d of June next (unless an acceptable offer is previously made by private contract one week at least before that date), the 3

BROMLEY HILL COAL AND IRON-WORKS,

comprising the BROMLEY HILL and MIDSUMMER LEVELS, containing 200 acres, and the IRON MINE adjoining, containing 400 acres, with a STEAM-ENGINE, of 45-horse power, and a BLAST FURNACE, capable of smelting 80 to 90 tons of pig-iron per week—situate in the village of BREAM, four miles from Coleford.

For particulars apply to Messrs. Chaplin, Richards, and Stubbin, solicitors, Birmingham; of Arthur Ryland, Esq., Birmingham; Messrs. Abbott & Lucas, solicitors, Bristol; at the place of sale; and of Messrs. Adam Murray and Son, surveyors and land agents, No. 35, Craven-street, London.

COUNTY CARMARTHEN.

HIGHLY IMPORTANT FOR INVESTMENT, AND TO COAL PROPRIETORS AND OWNERS OF IRON-WORKS.

WILL BE SOLD, AT AUCTION, in the course of the SUMMER, unless previously disposed of by private contract, of which due notice will be given, 4

CWM BLAEN-Y-GARNANT,

in the parish of BETTWS, consisting of a MESSUAGE, GARDEN, and PREMISES, in good repair, and 58A. 3R. 10P., more or less, of ARABLE, MEADOW, PASTURE, and WOOD LAND, lying (with the exception of 12A. 3R. 33P.) in a ring fence, bounded on the north by the River Amman, dividing the counties of Carmarthen and Glamorgan.

The ESTATE is extremely rich in IRON ORE and COAL of the best quality; is supposed also to contain LEAD. It is admirably situated for the erection of Iron Works, the blast for which may be produced by water-power, instead of by steam, and the veins, lying flatter than all others in the neighbourhood, are capable of being worked at a much less expense.

The line of the Llanelly Railway runs through the estate, and another railroad, to join the Swansea Canal at Ponty Dawa, a distance of about 6 miles, is being constructed.

There are extensive COAL PITS opened, and very profitably worked, immediately adjoining the estate. The timber and trees will be sold along with the farm, according to value.

For further particulars apply to Mr. George Webb, Kymeridge, Wareham, Dorset; or to Messrs. H. U. and N. Coulthurst, solicitors, 13, New Inn, London.

LEAD MANUFACTORY, BRISTOL.—TO BE SOLD, the extensive PREMISES now in the occupation of Robert Bayley and Co., situate at EASTON: they comprise a ROLLING-MILL, PIPE-MILL, and the entire PLANT, for the manufacture of White Lead; also a powerful STEAM-ENGINE. The premises stand upon about five acres of land, including capital dwelling-house, two workmen's cottages, field and garden.—For particulars apply to Messrs. Osborne, Ward, and Co., solicitors, Broad-street, Bristol. 5

DYFFRYN ALED COPPER MINES,—LLANSANNAN, near DENBIGH, NORTH WALES.—TO BE SOLD, BY PRIVATE TREATY.—This Mine has produced upwards of £10,000 worth of the richest copper ore, and is now being worked to a profit, but circumstances induce the present company to sell. Some of the present partners would take shares in a new-formed Company, and they hold the promise of a renewed lease at moderate royalties. 6

Apply to Mr. Thomas Evans, solicitor, Denbigh, North Wales.

TO BE LET, OR SOLD,—the VENALT IRON-WORKS, consisting of an ENGINE-HOUSE, with powerful BLAST-ENGINE, TWO HOT-BLAST FURNACES, CASTING-HOUSES, OFFICE, DWELLING-HOUSE, STABLES, &c. These WORKS are situated in the VALE OF NEATH, GLAMORGANSHIRE, within a few yards of the Vale of Neath Railway, and communicate with the Neath Canal by a private railroad. 7

The MINERALS under 700 acres of land—viz., ANTHRACITE and BITUMINOUS COAL, FREE-BURNING or STEAM COAL (of known character), and IRON ORE, both Argillaceous and Black-band, mostly opened by levels, WILL BE LET on LOW ROYALTIES with the WORKS. The site and quality of the Coal are well adapted for the manufacture of Tin-plates.

For further particulars apply to the proprietor, N. Edwards Vaughan, Esq., Rheola, Merthyr Tydvil; or Mr. G. Halket, Wainskiel, Bridgend.

VALUABLE COAL AND IRONSTONE MINES.—TO BE LET, MINES OF COAL and IRONSTONE; also an extensive BED of BLUE MARL—lying under an estate in NORTH STAFFORDSHIRE. An engine is already put up, and a shaft sunk to the top coal, and the next mine has been bored to. The Engine and Plant may be paid for at a valuation, by instalments, or rented with the mines. The said Mines of Ironstone have been worked in the adjoining estate, and the Red Mines were found of considerable thickness, and good quality.—For particulars apply to Mr. W. S. Cope, coal viewer, Hallfield Cottage, Hanley, Staffordshire.—April, 1851. 8

ANTHRACITE COLLIERY.—VALUABLE COLLIERY in PEMBROKESHIRE, now in full work on the Lower Level Vein of Coal, which commands a ready sale in the London market, and is most valuable for Malting, Steam Purposes, &c., TO BE LET, with immediate possession, with the ENGINES, MACHINERY, RAILWAYS, PLANT, and IMPLEMENTS. A new pit has been sunk about 60 fathoms, to reach the famous Kilgetty Deep Vein, and is believed to be within 15 fathom of this vein, which produces the purest ANTHRACITE COAL yet discovered, and realises the highest prices from maltsters. 9

The colliery is distant only four miles from the harbour of Saundersfoot, with which there is direct railway communication from the pit's mouth.

For further particulars and terms apply to Messrs. Ranken, Ford, Longbourne, and Vickerman, solicitors, Gray's Inn, London; Mr. H. P. Goode, land agent, Haverfordwest; or Capt. Stephenson, harbour master, Saundersfoot, Pembrokeshire.

LAMB'S HOUSE QUARRY, situate within two miles of NORTH DELABOLE, CORNWALL, and less than one mile from the shipping place, produces SLATE equal in quality to any hitherto discovered in Wales or Cornwall. The party now holding this Quarry is desirous of DISPOSING of ONE-HALF—that is, the person who may purchase a moiety shall have an equal share with the present lessee. To prevent misunderstanding, no one need apply who is unable to command £1000. Apply to Mr. William Sloggatt, jun., Boscastle. 10

TO BE DISPOSED OF, BY PRIVATE CONTRACT, a valuable SLATE QUARRY, situated within seven miles of Port Madoc, under a lease of 33 years. The quality is excellent, and a fine blue colour; the Quarry has been worked for some time, and a considerable quantity of slates has been sent off, and is an investment worth the attention of parties disposed to embark in that line.—For further particulars apply to Mr. Thomas Roberts, auctioneer, Bangor. 11

TO BE LET, ON LEASE, a capital SLATE QUARRY, known by the name of the SEALY HAM QUARRY; it has been worked for 25 years, and has covered the principal houses in the county— is of a fine blue colour, extremely durable, and is too well known to need any recommendation. It is situate about half a mile from the South Wales Railroad, and half-way between Haverfordwest and Fishguard—about 7 miles from each place, and adjoining the turnpike-road. Water machinery is used, and every accommodation will be given for carrying on the work. Apply to Mr. Edwardes, Sealy Ham.—April 3, 1851. 12

TO BE LET,—A Valuable PLOT OF GROUND, containing about TWO ACRES, adjoining the LLANELLY FLOATING DOCK, to which there is a line of rail, communicating also with the collieries in the neighbourhood, the coals from which are of the best quality for steam purposes. On the Plot of Ground a Building has been erected, with Engine-house; it is suitable for a Manufactory of Patent Fuel (for which purpose it was erected), or may easily be converted into a Millwrights', Engineers', Saw-mill, Flour-mill, or any other purpose where the power of a 30-horse engine may be required; the present PLANT and STEAM-ENGINE, &c., to be taken at a VALUATION.—Lowest rent, without plant and steam-engine, £120 per annum. 13

Apply to Mr. Benjamin Jones, Llanelly, Carmarthenshire.

MR. JAMES CROFTS, of 4, KING-STREET, CHEAPSIDE, MINING BROKER, in renewing his OFFERS of SERVICE to CAPITALISTS seeking the means of SECURE INVESTMENTS, which can be made to yield an annual income of 15 to 20 per cent., has the pleasure of stating that a MINING EXCHANGE has now been ESTABLISHED, of which he is a Member.

The advantages of such an organisation of mining affairs will extend to all business entrusted to his hands, the Sales and Purchases being publicly made, and the Prices registered. Mr. CROFTS OFFICE HOURS will now be from Ten to Twelve, and One to Four.—EXCHANGE HOURS Twelve to One, and Four to Five. 14

MR. CROFTS HAS SPECIALLY FOR SALE—

Tincroft	Trehane (2 shares)
South Tamar (50 shares)	Wheal Venton (10 shares)
East Tamar (30 shares)	West Caradon (1 share)
Woodman's Well and Broadridge	Devon and Courtenay (35 shares)
Spearne Consols (30 shares)	Nap Down Consols (50 shares)
Grambler and St. Anbyn (1 share)	Roylage, Leek (100 shares)
Duke of Cornwall (10 shares)	Lamberooe Wheal Maria (5 shares)
North Wheal Robert (10 shares)	Wheal Harriet (50 shares)
Wheal Vincent (20 shares)	Crebor (10 shares)
Bedford United (17 shares)	Silver Valley (10 shares)
Bodmin Consols (15 shares)	East Wheal Reeth (15 shares)

No. 4, King-street, Cheapside, April 11, 1851.

MR. EVAN HOPKINS, C.E., has ARRIVED in TOWN, and can be CONSULTED at his OFFICES, 13, AUSTINFRIARS, CITY, daily, between the hours of Eleven and Four. 15

MR. J. H. MANDEVILLE, MINING AND GENERAL SHARE AGENT, *No. 22, CHANGE-ALLEY, CORNHILL.* 16

MINING OFFICES, No. 75, OLD BROAD-STREET.—Mr. T. P. THOMAS begs to inform his friends that he has REMOVED from No. 3, George yard, to the ABOVE ADDRESS, where he hopes to receive a continuation of their favours. 17

MINING INVESTMENT.—THOS. FULLER & CO., 51, THREADNEEDLE-STREET, LONDON, have SHARES in several DIVIDEND-PAYING MINES on hand, which will pay from 15 to 25 per cent. on present purchase; also several in new undertakings, which have the greatest chance of success, including Appledore Silver-lead Mine, Devon Consols North, East Russell, Wheal Caradon, &c. T. FULLER & CO. beg to offer their services in the PURCHASE or DISPOSAL of all descriptions of MINING PROPERTY, and will take great pleasure in furnishing every information connected therewith, and which may be obtained at all times on application at their offices. 18

MINING SHARE AND METAL BROKER, *OFFICES,—No. 75, OLD BROAD-STREET, CITY.*

Mr. THOMAS JORDAN has FOR SALE SHARES in the following DIVIDEND-PAYING and other first-rate MINES:—Alfred Consols, Lelant Consols, Fowey Consols, North Wheal Basset, Stray Park, Bryn Arian, Wheal Harriet, Cook's Kitchen, Cefn Gwyn, East Wheal Russel, West Goginan, Allt-y-Crib, Dyfngwm, and many other mines in full working, and is now prepared to CONDUCT PURCHASES in all DESCRIPTIONS of MINING PROPERTY. 19

MINING SHARES.—Mr. HENRY VATCHER, EXETER, OFFERS his ADVICE and ASSISTANCE to PARTIES willing to INVEST in the ABOVE SECURITIES. Ten years' residence in Exeter, together with periodical visits to nearly all the Mines in Devon and Cornwall, enables him to become thoroughly acquainted with their respective merits.—Mr. VATCHER has at his command, at all times, practical and experienced agents, so that if any inspection is required, the same can be done without delay. 20

MINING AND RAILWAY OFFICES, No. 3, CASTLE-TERRACE, EXETER.—Mr. JOHN JURY, RAILWAY and MINING SHARE-BROKER, OFFERS his SERVICES to CAPITALISTS in the PURCHASE or SALE of ANY DESCRIPTION OF PROPERTY; and will be happy to point out a selection of such stock as appear the most eligible, from data that can only be arrived at by those who give an undivided attention to the subject.—Every information afforded (either in person or by letter) to capitalists wishing to invest or exchange their securities, and sales or purchases effected upon the best terms, and at one-half the commission usually charged. 21

MR. BELL WILLIAMS, MINE BROKER and VIEWER, 16, *CASTLE-STREET, LIVERPOOL.* 22

MR. JOHN DAVIES, MINING SHAREBROKER, *No. 38, TOWER-BUILDINGS, TOWER-GARDEN, LIVERPOOL.* 23

ASTURIAN MINING COMPANY.—Notice is hereby given, that a SPECIAL GENERAL MEETING of the shareholders will be HELD at the London Tavern, Bishopsgate-street, in the city of London, on Thursday, the 17th day of April inst., at One o'clock precisely, to receive a Report by the Trustees appointed by the shareholders, and to pass any resolutions arising from the consideration of the same—to confirm an agreement entered into between the trustees and the purchaser of the Company's property and works—to nominate two directors to represent the shareholders in the company about to be formed under the contract of sale—to give powers and authorities to the said directors, and for the transaction of other business. 24

By order, KENNETH MACKENZIE, Secretary.

Asturian Mining Company's Offices, 26, Throgmorton-street, London, April 5, 1851.

NEW WHEAL ROSE SILVER-LEAD MINE,—ST. ALLEN, CORNWALL.—In 6000 shares. Deposit £2 per share. APPLICATIONS for SHARES in the ABOVE MINE to be made to Mr. ALF. LYONS BELLINGER, at the offices of the Company, 1, St. Michael's-alley, Cornhill, where reports, plans, and every information can be obtained. 25

WHEAL MARY EMMA,—LYDFORD, DEVON.—A MEETING of the shareholders in this Mine will TAKE PLACE on Thursday next, at Mr. Gren's Office, 1, Royal Exchange-buildings.—April 11, 1851. 26

AMSTERDAM WATER-WORKS COMPANY (RHINE SUPPLY).—This is to give Notice, that the LETTERS OF ALLOTMENT of SHARES in this COMPANY will be ISSUED on MONDAY NEXT, the 14th inst., and those parties who do not receive Allotments, will please to accept this acknowledgment from the Directors of their inability to comply with applications so numerous. 27

Offices of the London Agency, April 11, 1851.

STEAM TO INDIA AND CHINA, VIA EGYPT.—Regular MONTHLY MAIL (steam conveyance) for PASSENGERS and LIGHT GOODS to CEYLON, MADRAS, CALCUTTA, PENANG, SINGAPORE, and HONG-KONG.

THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY 28

BOOK PASSENGERS and RECEIVE GOODS and PARCELS for the ABOVE PORTS by their steamers—starting from Southampton on the 20th of every month; and from Suez on or about the 10th of the month.

BOMBAY.—Passengers for Bombay can proceed by this company's steamers of the 29th of the month, to Malta, thence to Alexandria by her Majesty's steamers, and from Suez by the Honourable East India Company's steamers.

MEDITERRANEAN.—MALTA—On the 20th and 29th of every month. CONSTANTINOPLE—On the 29th of the month. ALEXANDRIA—On the 20th of the month.

SPAIN AND PORTUGAL.—Vigo, Oporto, Lisbon, Cadiz, and Gibraltar, on the 7th 17th, and 27th of the month.

For plans of the vessels, rates of passage-money, and to secure passages and ship cargo, apply at the company's offices, No. 122, Leadenhall-street, London; and Oriental-place, Southampton.

OCEAN STEAMING—FIFTY MILES AN HOUR!—The INVENTOR of this NEW METHOD of STEAMING at SEA, with a view of GRANTING LICENSES, proposes PATENTING his INVENTION when the present Patent Laws are modified. This will enable individuals, as well as companies, to run a steam sea mansion to distant lands. Some of the advantages to be derived from this new principle are: the saving of time—its great safety, economy, and convenience in the building, common carpenters doing the work—its capabilities for carrying cabin passengers, say 200 in one mansion.—J. BROWNE, Esq., Inventor, 30, Great Portland-street, Portland-place.—N.B. Accelerated speed is obtained by nullifying resistance. 29

STIRLING'S PATENTS FOR IMPROVEMENTS IN IRON.—1. TOUGHENED CAST-IRON, which is double the strength of ordinary cast-iron, and only 10s. to 12s. per ton extra.

2. ANTI-LAMINATING IRON, for RAILS and TIRES, &c., at an extra price of from 7s. 6d. to 10s. per ton. Also IMPROVEMENTS in the MAKING of WROUGHT-IRON—saving one process to the manufacturer.

The following Iron Manufacturers are duly LICENSED to MAKE the IRON:— 30

Messrs. BAIRDS'	Gartsherrie, Glasgow.
The CLYDE IRON COMPANY	ditto ditto
The FIRTH IRON COMPANY	ditto ditto
The HERSLEY COMPANY	Tipton, Staffordshire.
Messrs. LLOYDS, FOSTER, & CO.	Wednesbury.
Mr. JOHN WILSON	Dundyvan, Glasgow.

AGENTS.

Messrs. GARDEN and MACANDREW, 34, Dowgate-hill, London.

Messrs. W. & J. H. JOHNSON, 166, Buchanan-street, Glasgow, and 20, St. Andrew's-square, Edinburgh.

Further particulars may be obtained on application to the agents; or to Mr. JEE, civil engineer, No. 6, John-street, Adelphi, London.

MINE MANAGER WANTED, for a MINE in the neighbourhood of LISKEARD. None but the most experienced need apply, as a liberal salary will be given to a fully competent person.—Address, with testimonials, to "S.," at the office of the *Mining Journal*, 26, Fleet-street, London.—April 9, 1851. 31

MINE CAPTAIN WANTED, for WHEAL WILLIAMS, CALSTOCK, CORNWALL.—Address, with testimonials, to the Secretary, No. 20, St. Helen's-place, London.—April 8, 1851. 32

TO FURNACE AND FOUNDRY MANAGERS.—WANTED, a competent PERSON to undertake the MANAGEMENT of the STAVELEY OLD WORKS: he must thoroughly understand the most improved modes of making iron and all sorts of castings; and, consequently, be well acquainted with engineering and model making. No one need apply whose character and abilities will not stand the test of minute inquiry.—Letters, stating terms and qualifications, and former services, to be addressed to Mr. Richard Barrow, Staveley Works, near Chesterfield. 33

WANTED also, a HEAD WORKING MOULDER.

TO COLLIERY OWNERS AND MERCHANTS.—A Gentleman, possessing a first-rate CONNECTION for the DISPOSAL of COALS among Manufacturers and Furnace-owners in FRANCE, would be happy to REPRESENT the INTEREST of a respectable FIRM. References exchanged.—Address to "G. G." at the office of the *Mining Journal*, 26, Fleet-street, London. 34

TO CAPITALISTS—SOME HIGHLY ADVANTAGEOUS INVESTMENTS IN MINES AND SLATE QUARRIES.—For particulars apply by letter, from principals only, to "Alpha," at the office of the *Mining Journal*, No. 26, Fleet-street, London. 35

TO PLUMBERS, TIN-PLATE MANUFACTURERS, &c.—SHARES of a VALUABLE PATENT, connected with, and important to, Persons engaged in these and other analogous branches of business, to BE DISPOSED OF. Address "S. D. M." at the office of the *Mining Journal*, 26, Fleet-street, London. 36

TO BE SOLD, BY PRIVATE CONTRACT, a first-rate BLAST-ENGINE, 120-horse power, nearly new, with regulator, and every thing complete—capable of blowing three or four iron furnaces.—For references apply to Mr. Fulford, 3, Serle's-place, Lincoln's Inn, London. 37

TO BE LET, in Lots, for MINING PURPOSES, in NORTH WALES, for a term of 21 years, all that EXTENSIVE RANGE of METALLIFEROUS MOUNTAIN LANDS, part of the ABER HIRNANT ESTATE, within a few miles of the valuable Llangannog Lead Mines, the lode of which have been traced through the property, which is also intersected by various promising lodes, indicative of LEAD and COPPER—LIMESTONE abounds. The Crown claims have been redeemed. 38

Apply for particulars to H. Richardson, Esq., Aber Hirnant, Bala, North Wales.

CHEMICAL ANALYSIS, &c.—ANALYSIS and ASSAYS, or INVESTIGATIONS of ANY KIND, are UNDERTAKEN at the COLLEGE OF CHEMISTRY, LIVERPOOL. 39

Professor—Dr. SHERIDAN MUSPRATT, F.R.S.E.

Hon. Assistant—Mr. JOSEPH DANSON, F.C.S.

A list of Fees for Analysis, and for Students Working in the Laboratory, may be obtained by writing to Dr. Muspratt, College of Chemistry, Liverpool.

THE PYRACOUST, or FIRE and BURGLARY ALARUM.—A SUPPLY of this CHEAP, SIMPLE, and EFFICACIOUS INVENTION, for giving instantaneous ALARM in cases of FIRE or ROBBERY, is now on hand at the Offices, 80, NEWGATE-STREET.—Price of Fire Alarum, complete, in case, 4s. 6d. each—extra charge for burglary detectors. 40

HELSTON CONSOLS MINE.—The Committee beg to inform those PARTIES who have NOT RECEIVED their FULL ALLOTMENT of SHARES, that, in consequence of the great number of applications, it was IMPOSSIBLE to ALLOT MORE.—No applications received after Wednesday last could be entertained. 41

REGISTRY FOR THE SALE AND PURCHASE OF MINING SHARES.

DURRANT & CO., MINING SHAREBROKERS, 58, LOMBARD-STREET, LONDON, Beg to draw the attention of Capitalists to their REGISTRY for the SALE and PURCHASE of SHARES. 42

SHARES FOR DISPOSAL.

Devon Great Consols	Wheal Mary Ann	South Caradon
Carn Brea	Wellingtons	Great Wheal Sheba
West Caradon	West Buller	Treviskey
Trelawny	Tolgus	Bedford United

N.B.—Statistical information furnished on British and Foreign Mines.—No CHARGE made for the registration of shares unless business be transacted.

MESSRS. BOXALL & CO., MINE AND SHARE BROKERS, beg to inform their friends and correspondents that they have REMOVED from their offices, Crosby-hall Chambers, to No. 7, GEORGE-YARD, LOMBARD-STREET, where they solicit a continuance of their favours.—March 28, 1851. 43

MESSRS. TREVARTON AND CO., MINING SHARE DEALERS AND BROKERS,—5, *ST. JAMES'S-STREET, PALL-MALL.* 44

MR. PEET, MINING AGENT, 48, THREADNEEDLE-STREET, is now prepared to OFFER his SERVICES in the FORMATION of MINING COMPANIES, on the Cost-book System; and also to CONDUCT the LONDON AGENCY of those already established. His offices are advantageously situated. Satisfactory references can be given.—London, April 5, 1851. 45

MR. MANUEL begs to inform his Friends of his REMOVAL to No 26, AUSTINFRIARS, and would be happy to ASSIST in the FORMATION of COMPANIES for the WORKING of MINES, and conducting the MANAGEMENT of those ALREADY FORMED—having spacious and convenient Offices for that purpose. 46

MINES.—MOLYNEUX & CO., MINING and GENERAL SHARE AGENTS, 34, THREADNEEDLE-STREET, 6, FINSBURY-PLACE SOUTH, and 6, WEST-STREET, FINSBURY-CIRCUS, have SHARES ON SALE in DIVIDEND-PAYING and OTHER MINES, which will ensure to CAPITALISTS the safest and most unexceptionable investment.

MOLYNEUX & CO., grateful for past favours, beg to call the attention of their friends to their newly-occupied OFFICES, No. 34, THREADNEEDLE-STREET, where every attention will be paid to the PURCHASE or SALE OF SHARES. 47

*** Office hours from Ten to Four o'clock.

MINING AND SHARE OFFICES, ST. MICHAEL'S CHAMBERS, ST. MICHAEL'S-ALLEY, CORNHILL, LONDON. 48

Mr. R. TRIPP has FOR SALE SHARES in the best DIVIDEND-PAYING MINES, including Devon Great Consols, South Caradon, West Caradon, Wheal Tremayne, Margaret, Trelawny, Mary Ann, Condurrow, Alfred Consols, Treviskey and Barrier, North Pool, East Pool, West Providence, Bedford United, &c; and in others having present and prospective advantages, amongst which are—Holmbush, Bodmin Wheal Mary, Arthur, Bodmin Consols, West Alfred, Great Alfred, Hennock Lead, East Wheal Reeth, Merilyn, Wheal Lemon, Penzance Consols, &c., Mines. FOREIGN: St. John del Rey, United Mexican, Linares, Copiapo, &c., Mines.

THE MINING EXCHANGE OF LONDON.—At a MEETING of the COMMITTEE, held at the Jamaica Coffee-house, Cornhill, this 8th day of April, 1851, it was resolved:— 49

1. That for the present the Exchange be held in the Jamaica Coffee-house.
2. That the terms for admission be an annual subscription of £3 3s., and an entrance fee of £5 5s., so soon as 30 members shall be elected.
3. That persons desirous of becoming members are to send written applications, addressed to the Committee, stating whether they claim membership as agents or dealers.
4. That every person applying to be admitted a member of the Exchange must be recommended by two members.
5. That persons engaged in any other kind of business than mining shall not be eligible to be elected.
6. That the Committee shall have the power of rejecting any of such applications.
7. That none but members be admitted on the Exchange.
8. That the commission to be charged by those who act as agents shall be 2½ per cent.
9. That all transactions are to be deemed for cash payment upon delivery of transfers, unless specially arranged otherwise.
10. That all transactions for account must be completed once a fortnight—the day and hour for settling to be fixed by the Committee.
11. That the non-fulfilment of these arrangements subjects parties to be declared by the Committee defaulters, and no longer members of the Exchange.
12. That the Committee consist of five members, to be chosen by the members annually; or upon the death or resignation of either of them, within one month after such occurrence.
13. That three of the Committee form a quorum; and that in case of equality of numbers, the Chairman to have the casting vote.
14. That the Committee shall meet every Tuesday and Friday, at Four o'clock, for general purposes, and to make out a list of Mines' Prices, and such list to be published.
15. That no mining company, or mine, shall be mentioned in the official list, unless approved by the Committee.
16. That all matters in dispute relating to the business of the Exchange shall be referred to the Committee, whose decision shall be binding.
17. That the hours of business in the Exchange shall be from Eleven to Four o'clock.
18. That Messrs. Thomas Field and Joseph Yelloly Watson be the treasurers.

JAMES STRIDE, Hon. Secretary.

Transactions of Scientific Bodies.

MEETINGS DURING THE ENSUING WEEK.

THIS DAY	Royal Botanic—Inner Circle, Regent's-park	3½ P.M.
MONDAY	Geographical—3, Waterloo-place	8½ P.M.
	Statistical, 12, St. James's-square	3 P.M.
TUESDAY	Linnæan—Soho-square	8 P.M.
	Horticultural—21, Regent-street	2 P.M.
	Civil Engineers—25, Great George-street	8 P.M.
	Pathological—33, George street, Hanover-square	8 P.M.
WEDNESDAY	Microscopical—21, Regent-street	7 P.M.
	Ethnological—17, Saville-row	8 P.M.
SATURDAY	Medical—33, George-street, Hanover-square	5 P.M.

INSTITUTION OF CIVIL ENGINEERS.

APRIL 8.—WILLIAM CUBITT, Esq. (president), in the chair.

The first paper read was a "Description of Two Bridges over the River Don and the Canal, with the Lodge and Approaches, on the estate of Sir Joseph Copley, Bart., at Spotbro' near Doncaster," by Mr. H. CARR, Assoc. Inst. C.E.

The next paper read was "On the 'Nominal Horse-Power' of Steam-Engines," by Commander L. G. HEATH, R.N.

The inadequacy of the present term "nominal horse-power" for giving a definite idea of the absolute or relative power of engines was first examined, by comparing the engines of H.M.S. *Garland* and *Basilisk*, which were both constructed on the same principle, with oscillating cylinders, and were both used to drive paddle-wheels. This comparison was made under three distinct heads—the mean effective pressure, the number of revolutions per minute, and the size of the cylinders. It was urged that Watt's constant of 7 lbs. per square inch, for the mean effective pressure, was not only in itself inapplicable, but that no constant quantity could be universally applicable. Also, that the method of determining the number of revolutions per minute, from a conventional speed, founded on the length of stroke of the piston, was equally fallacious. It was, therefore, proposed that the term "nominal horse-power" should be abolished, and that engines should in future be designated by the cubic contents of their steam cylinders, conjointly with their nominal consumption of a standard description of fuel during a given period of one hour. A table might be drawn up, giving this nominal consumption in terms of the grate and the heating surface, and should be accompanied by rules and directions for ensuring the uniform measurement of the grate and the heating surface. This system, it was contended, would be more in accordance with the present practice of construction, and would enable the relative size and power of engines to be more accurately estimated than by the present method.

The discussion was adjourned until the meeting of April 15, when the following paper will be read—"On Foundations; natural and artificial," by Mr. S. CLEGG, Jun., M. Inst. C.E.

AMSTERDAM WATER-WORKS COMPANY—RHINE SUPPLY.

Much attention having been excited with reference to the objects of this company, as well as the privileges obtained and those required by the concessionaries, it may be well to take a review of the prospectus now presented, and a report submitted some two or three years since, whereby the advantages likely to be attained may be understood, while with the remarks made upon the required premiums we have nought to say, it being a question alone for the capitalist to determine on what terms he may be disposed to embark in the undertaking. The prospectus in itself, we must acknowledge, reads well; the names of the directors are highly respectable, and there is about the scheme an intent of purpose which deserves, and doubtless will be attended with success, assuming that the terms on which the privileges acquired are of an equitable nature. It would appear from the prospectus before us that the company is formed under the Dutch law of *Société Anonyme*, which limits the engagement and risk of each shareholder to the amount of his respective shares. Now this may be hardly said to apply to present parties, the shares being 25,000 in number, of 20*l.* each, on which a deposit of 12 florins, or 1*l.* sterling, is called, while the estimate is even less than four-fifths that amount. We will at once proceed to give a digest of the prospectus and report now before us, and leave to others to form their conclusions, satisfied as we are that if the basis be properly formed the structure will be successful. The first is, however, the main point. Amsterdam, it would appear, has a population of more than 200,000; the company possess the privilege in perpetuity from the Government of obtaining a supply from certain streams, which may be said to be a monopoly—a maximum price being fixed by the Government. The terms on which the company is proposed to be formed is, that "after a dividend of 6 per cent. shall have been paid to the proprietors on the amount invested"—that is to say, if the entire capital of 500,000*l.* be required, then the first profits of 30,000*l.* shall be applied as interest on the advance so made; then that "seven-eighths of the nett profit will be divided amongst the proprietors, and the remaining one-eighth as the statutes may direct." Now, assuming the surplus profits beyond the first payment of 6 per cent. to the shareholders to amount to 20,000*l.*, we should have 4 per cent. added to that of the subscribers, and making, in all, 10 per cent., and the remaining 2 per cent. applied "as the statutes may direct." Certain powers are vested in the board, and the preliminary expenses will be defrayed by the original promoters, unless the report and surveys be approved by at least eight of the directors.

Out of the number of shares (25,000) of which the company is constituted, 10,000 are to be reserved for Holland and the continent; 7000 of the remaining shares have been taken up antecedent to the issue of the prospectus, and 8000 are open to the public. With a brief abstract of Mr. Simpson's very candid and fair report before us, we close our notice of this scheme, which we think is well deserving attention by all whose interests may be affected by the success of the measure. We find from Mr. Simpson's report, made in June, 1848, that the cost attendant on the works from the source to Amsterdam, including establishments at Brenkelen, would be 117,675*l.* 11s. 10d.; works in Amsterdam, including mains and pipes, but exclusive of "service" pipes, 192,313*l.* 10s.; the service pipes, with fittings for 40,000 families, 103,336*l.* 6s. 8d.; surveys and legal proceedings, 4000*l.*; purchase of land, 11,579*l.* 3s. 4d.; and contingencies (a small figure), 2765*l.* 1s. 6d.—making together a total estimate of 431,666*l.* 13s. 4d.

Mr. Simpson observes—"With regard to the commercial prospects of a scheme of this kind, I am of opinion that there cannot be a reasonable doubt that the undertaking would be highly remunerative. Even while affording an immense reduction upon the present prices of water, and supposing the charges to be only about *one-fourth* of the maximum allowed by the *concession*, it will be seen that upon this scale a dividend of *twenty* per cent. will be derived upon the capital expended."

After expressing his opinion that an outlay of 350,000*l.* would be adequate for the purposes required, Mr. Simpson observes that his object would be to construct the works on a scale of sufficient magnitude to supply in the summer months 4,000,000 imperial gallons, or about 18,000 cubic metres daily, while the concession only appears to stipulate for 4000 cubic metres, or less than one-fourth the quantity, which, in his opinion, would prove insufficient. To follow out the estimate, it is assumed that the net average quantity to be supplied at 3,000,000 gallons daily, for 312 days in the year, at 2s. per 1000 gallons, or about one-fourth of the maximum price referred to as allowed in the concession, the annual income would be 93,600*l.* sterling, from which deduct the estimated cost 15,600*l.*, being 4d. per 1000 gallons, and interest and redemption of capital to be paid for the concession, interest on advances, and for a reserve fund 7½ per cent. on 93,600*l.*, being 7020*l.*: together, 22,620*l.*—would leave a nett annual income of 70,980*l.* on the capital invested. We now close our notice, leaving it to those disposed to embark capital in enterprises of this nature to collate information and conclusive evidence for themselves.

THE SCOTTISH AMICABLE LIFE ASSURANCE SOCIETY.

The periodical statement of the directors to the assured, at the annual meeting of this society recently held, is an interesting document, and one which while it fully shows that the advantages, and even the moral duties, of life assurance are being every year more and more appreciated by the public, is a convincing proof of the reproductive character of the mutual assurance system, that it affords every desirable security, and that it is eminently calculated to secure the profits to those parties who certainly have the greatest right to them—the assured themselves. The report shows that the business has rather been increased by the diffusion of its benefits among numerous assurers than by heavy additions and large risks. The capital amount insured during the year 1850 has been 356,367*l.*, the amount of corresponding premiums being 12,278*l.* 0s. 8d. The nett increase to the sums assured since the commencement, deducting for policies emerged, forfeited, surrendered, and not taken up, was 272,354*l.* 9s., and corresponding increase of premiums 8764*l.* 15s. In addition, there has been received in single premiums for assurances and annuities 4962*l.* 12s. 9d., the number of policies issued during the year has been 944, and nett increase, deducting as above, 809. The rate of mortality has been moderate, the deaths amounting to little more than 1 per cent., but from the falling in of some heavy claims the per centage of the sums paid considerably exceeds the per centage of deaths. The extension of the business in London by the establishment of an office there has been successful beyond expectation. Local boards of gentlemen of high standing and character have been appointed in Dublin and Aberdeen, associated with the respective agents in those places, and which, it is anticipated, will greatly forward the interests of the society. Established in Glasgow in 1826, in a spirit of liberality not previously adopted, but still consistent with prudence and safety, closely connected with the mercantile interests of the country, and through the London office with the commerce of the metropolis, this institution appears happily calculated to disseminate the great blessings of the system to an extent at least equal to any other established company.

ATMOSPHERIC INFLUENCES.—NEW SERIES—No. VI.

BY FRANKLIN COXWORTHY, AUTHOR OF "ELECTRICAL CONDITION."

So long has "gravitation" been regarded as referable merely to an attractive force in the earth, that we can readily comprehend a difficulty in the reception of a principle of an immediately opposite character; nor is it in our power, by argument alone, to remove from the mind false impressions of such long standing; such effects can be produced only by time and reflection. If two bags, filled one with carbonic acid and the other with hydrogen, be released from an eminence, one will fall and the other will rise; the descent we ascribe to "attraction of gravitation;" but there being no law to which to refer the ascent, the *savant*, rather than expose his ignorance in the matter, has concocted the word "displacement," although it must be evident, that unless there were some ruling power the body would be motionless; if, however, it be allowed that the hydrogen is negative, and the upper regions positive, the *cause* of its being drawn upwards can no longer be a mystery; and it will likewise be allowed that matter in a more highly negative state must be acted on with a force proportionate to the difference of electrical condition.

Metals, then, in a gaseous state must clearly be in this condition; and when the oxygen atmosphere prevailed, the effect could have been no other than that of which such ample evidence is afforded in all mountainous districts,—the raising of this matter through those parts of the globe which offered the least resistance, and afforded the most ready passage for the electrical influence of the oxygen, or of the upper regions, on the heated mass below the crust. There are certain properties in matter which, however, well-defined, we are not yet in a condition clearly to comprehend. Water is a good conductor of electricity, but a very bad conductor of those electrical conditions understood by "heat" and "cold"—a property imparted to it, doubtless, for some wise purpose; and, therefore, during the oxygen period, all those portions of the globe covered by that fluid were securely protected from this electrical influence; and matter is a good conductor in proportion to its hardness or compact nature, although it would naturally offer an amount of resistance equal to the bulk; and a concavity on one side implies a convexity on the other, which would tend to increase that resistance. Those parts of the liquid mass of the globe, therefore, most subjected to the electrical influence of the atmosphere of this period, were those most acted on; and it being essential that the supply should be equal to the demand, the boundaries or margin of the continent supplied both requisites;—first, by presenting the least amount of resistance; and, secondly, by the depressing influence of the ocean on its soft bed, filling up the vacuum as fast as it was formed; the Mediterranean, Black, Caspian, and other inland seas, being, we conceive, referable to the mountainous districts by which they are surrounded.

The uplifting of the earth and creation of vast ponderous masses in different parts, together with the extraction from beneath of a corresponding amount of the liquid foundation, could not fail in producing extensive cracks; and at the time that these were formed another disturbing cause came into operation. Whether an electric current be made to flow round a bar of iron, or the bar be made to revolve in an electric atmosphere, the effect is the same,—the bar is thrown into a magnetic condition; when, therefore, the atmosphere raised the earth, it also imparted to it magnetic condition, which drew toward its positive pole the metalliferous matter as formed; two causes—the cracking and magnetic condition—that could not fail in dividing the earth into a multitude of pieces; and about this period, we conceive, the eastern separated from the western continent. That such a separation has taken place the eastern coast of America and the western coast of Africa and Europe afford ample evidence, whilst no such similarity is to be traced in the opposite shores.

We have already observed that oxygen in contact with organic matter rapidly generates carbonic acid, and, therefore, through an immense space of time, the lower portions of the earth must have been alternately under the influence of these atmospheres; consequently, whilst the oxygen influence constantly prevailed on all high mountainous districts, the carbonic acid predominated on the other portions of the globe; and electricity is the cause of crystallisation. That these principles have existed there is no deficiency of evidence, although to make good our position it is necessary to question the correctness of a prevailing opinion respecting one of the most interesting features in geology, whilst it must be allowed that, in the absence of fixed principles, the conclusions arrived at are, at least, reasonable. Flints are considered by the geologist to have been sponges, which by some operation, not defined, have been resolved into their present condition; but on more mature reflection it will be allowed, we think, that the formation is purely one of aggregation. In flints are found animals and other foreign matter, to which the silica is frequently little more than a slight covering; and we have in our possession a flint with a flower on its surface, more beautifully defined than if it were laid on by hand;—an adhesion that never could have taken place with a sponge or any material equally hard; but if, on the contrary, flints be merely an accumulation of silica, crystallised under the influence of the oxygen atmosphere, all their different conditions are at once understood; and it will be equally evident why they should be deposited in the chalk formation in such straight lines, as in the cliffs of Kent; the flint being deposited during the oxygen atmosphere, and the chalk during the more extended periods of the carbonic acid atmosphere.

MANUFACTURE OF ARSENIC FROM REFUSE ORES.—A prospectus has just been issued by a company under the title of the "Devon Chemical Works Company," for the purpose of obtaining the metallic produce of both copper and arsenic from ores of too low a per centage to pay for extraction by other means, under a patent obtained by Mr. Brereton Todd. Large quantities of ores of this description are to be found among the halvan heaps at many of the mines, both in Devon and Cornwall. The process has been tested on a large scale, and is stated to have been so decidedly successful, that the clearest proof has been afforded of the realisation of a profitable return to the extent of from twenty-five to thirty per cent. on the capital. The efficacy of the process was satisfactorily demonstrated to a small body of gentlemen of capital, accompanied by an analytical chemist, and afterwards confirmed by the reports of two eminent metallurgical chemists in London, and induced the formation of a company, the directors of which have made advantageous arrangements with the patentee, the object being to carry into effect the process mentioned to the greatest practical extent; and as the consumption of arsenic is great, and considerably on the increase, a wide field is opened for this description of commercial enterprise. It is largely employed in the manufacture of several pigments, in glass, for glazing china and pottery ware, and numerous other purposes, chemical and manufacturing. The demand in the United States is increasing, and extensive exportations to that country take place; and should a reduction in price be effected by the company's operations, there is every reason to expect the employment of this mineral would have a still wider range. The company is in 10,000 2*l.* shares, on which 1*l.* deposit is to be paid.

THE USE OF ESCAPE GASES FROM BLAST FURNACES.—Since the introduction of the hot-blast for making pig-iron, there has been nothing decidedly new introduced into the manufacture, until the modern applications of the escape gases from the blast furnace to various heating purposes. A successful example of one system of applying these gases—viz., to the heating of the air-blast, is to be seen at the Dundyvan Iron-Works. Mr. Mackenzie, the manager, draws off the gases by suitable holes and channels in the furnace, with the assistance of a large chimney—igniting the current at the point where the air-pipes are placed. This arrangement has produced results sufficiently encouraging to tempt many other ironmasters to adopt it. The quantity of gas tapped off in this way far exceeds that necessary for heating the air, and the balance is carried to the use of the blowing-engine boilers, for raising steam, instead of coal. A third use, and in my idea by far the most valuable of the application of the gases, is the calcining or roasting of clay-band ironstone. The furnaces now in use in Lanarkshire, use no other ore than the black-band, an ore that calcines itself without the aid of coal. But it is well ascertained that this ore is being rapidly exhausted. When the supply fails, we shall be compelled to go to some distance for the clay-band ore, of which immense quantities are found between the coal measures and the limestone. The drawback to the extended use of the clay-band is the great expense of working it, and the additional amount of coal and labour for calcining it. As I have had some experience with the clay ironstone, I am able to state that it takes 3 tons 4 cwts. in the raw state to produce 1 ton of pig-iron, and this quantity requires, for open calcination, 1 ton of coals, 2s. 6d.; labour, 3½d. per ton, 11d.—cost for calcining, 3s. 5d. Now, at Coltness Iron-Works, the other day, I saw the ironstone being calcined with the gas carried off from the furnace, as before described, in a brick-kiln, 18 feet in diameter, and 10 or 12 ft. in length, and made to hold about 140 tons. Five days afterwards, I again went to Coltness, and found the ironstone most thoroughly and regularly calcined throughout, and entirely free from being run—to which ironstone is liable in stormy weather, when burned in open kilns. Mr. Mushet, in his work on the making of pig-iron, states that all clay ironstones absorb, when calcining, about 18 per cent. of oxygen; so that, by calcining the ironstone in close kilns with the gas, and where the atmosphere is excluded, a further saving of coal takes place in the furnace; and the manager of the Coltness Iron-Works says that he has found this to be correct. These late improvements, then, form a step in the right direction, to keep down the expense of making iron, when the black-band ironstone gets scarce and dear. —W. MARSHALL: *Glasgow Mechanics' Journal.*

SHIPMENTS OF GOLD FROM CALIFORNIA.

Authentic statement of the amount of gold shipped from California, from its discovery, in 1849, to the present time:—

Gold dust shipped by steamers, from 1st April, 1849, to 31st Dec., 1850	$ 34,570,255
Estimated to have been taken by passengers	4,571,500
Shipped to foreign Pacific ports and to Europe, coined, manufactured into jewellery in California, and forwarded per sailing vessels, as per custom-house reports	4,576,042
Carried overland and coastwise by miners from Mexico, Chili, and Oregon, shipped by merchants without manifest entry, and amount at present in possession of miners, merchants, &c.	19,000,000
	$62,717,797
In the above estimates the value of gold dust has been computed at $16 per ounce troy. To this amount should be added $1·50, the Mint value—say	5,869,794
Total	$68,587,591

QUICKSILVER IN CALIFORNIA.—The *Placer Times* says,—"It is very generally known that quicksilver mines have been worked to some extent for many years in California, but until the discovery of gold little attention has been bestowed upon them. For some months past quicksilver has been offered in our market, known as coming from the New Almaden Mines. The principal mines in California are the Guadalupe and New Almaden, and are situated in the same neighbourhood, some four miles distant from each other. These mines are about eight miles from San Jose, and can be reached by a good road at all seasons of the year. We are told that the mines are now worked extensively, the produce amounting to several millions of dollars the present season, and that the yield from the ore is almost past belief: 85 per cent of pure mercury is not an uncommon yield."

DESCRIPTION OF A TUNNEL IN THE GOLD QUARTZ MOUNTAINS.—A new system of mining is becoming very popular here, and which it is thought will be eminently successful. For particulars, I refer you to the following description of what is called the "Gold Tunnel," which was the first enterprise of the kind. It was given by Mr. W. A. Fitzpatrick, who owns a large part, and has managed the operation:—"Some three months since, Messrs. Barker and Co. commenced working in a ravine just below the Roger Williams' spring, in Nevada, and on the bank of Deer Creek. They found gold near the surface, but which, instead of reposing on the soft or rotten granite, as other deposits in this vicinity generally do, the lead descended into the mountain side, becoming richer and more extended the deeper the shaft was sunk. They finally concluded to commence lower down in the ravine, and drift or tunnel in, and thus strike the lead from that direction. The company not being acquainted with such operations, Mr. Fitzpatrick undertook it for a share: he commenced some 200 feet below the shaft first sunk, and has run the tunnel into the vein. It has been a great undertaking, but so far eminently successful. The tunnel is nearly 6 feet high by 3 wide, and is safely timbered up and planked overhead, and has a railway and car to take the earth and ore out with. The matrix of the gold is a ferruginous quartz, much broken by some movement of large rocks, as is evident from the slickensides abundant in the tunnel. The gold abounds in aqueous clay, and in solid pieces of broken quartz, which will have to be crushed by machinery or manual labour previous to washing out. Earth taken promiscuously from the vein of lead, without selection, yields from $2 to $30 to a panful. When the vein or lead was first struck, it yielded but from 10 to 20 cents to the pan, and was but a few inches in thickness; now it is from 2 feet to 4 feet in thickness. The dip of the vein is in an eastern course; it crops out on the side of the hill to the south. Veins of quartz containing gold have been found in different places, as also detached pieces of quartz, very rich, but none of them could be worked without a large outlay of capital, being generally too far from water, and doubtful as to the yield of the same when worked. The granite in the 'Gold Tunnel' claims is much softer than common, which makes it more difficult to timber, but easier to work. I have been thus particular in describing the 'Gold Tunnel' from the fact that it is the only metallic vein worked in this section of the country, all other leads being found in gravel reposing on granite, at all depths to 100 feet. Coyota diggings are those where a shaft has been sunk, and then drifting down in different directions, and has generally been very successful. The amount of earth thrown up in the ravines of washing is very great, and, perhaps, I should be justified in saying that, often washed out, it would amount to more than $2,000,000. Many of our best-informed citizens say that, next year, mining will be more successful than it has been during the past season."—*Marysville* (California) *Herald.*

CALIFORNIAN SPECULATIONS.—One of the French bubble companies for Californian mining, which has put out feelers in every direction, advertises shares in the Turkish paper published at Smyrna. So much for the march of intellect.

REPUBLIC OF ECUADOR.—The mineral wealth of this country is very considerable: in the valleys rich deposits of gold occur, though of a superficial character from the mode of their formation, and in the rocky stratum of the mountainous ranges at the heads of these valleys are the veins of precious metal whence the lower deposits were derived. Traces of silver exist throughout the country; rich copper ores are found in the district of Rio Bamba; and iron ore abounds in very many localities. But the absence of roads, and of energy, enterprise, and science among the people, has prevented any very extensive mining operations.

MINING IN BRAZIL.—A discovery has been made near Bananal, in the Santa Rita formation. This is mica slate, and yields, according to assay of Mr. Percival Johnson, 84 grains of gold to the ton of 20 cwts. Whether this will hold through remains to be seen.

STORM PROGNOSTICATOR.—We have before noticed in the columns of the *Mining Journal* the meteorological investigations followed up by Dr. Merryweather, of Whitby, to enable him with certainty to foretel storms, or any serious change in the electric condition of the atmosphere. The apparatus has now been perfected, and is, we believe, in the Exhibition building; while a pamphlet descriptive of his researches and progress is now before us. Having satisfied himself by previous long practical experience that he was in possession of a never-failing source of prophetic information by which he could foretel the approach of a storm by many hours, he put himself in communication with the president of the Whitby Philosophical Society, and established a plan between them, by which Dr. Merryweather continually forwarded his observations, that Mr. Belcher could notify the time which elapsed between the indication and the breaking of the storm. This commenced on 27th Jan., 1850, when a storm was foretold 48 hours before it took place on the 29th, with very disastrous effects, and during the year above 30 storms, more or less severe, were foretold with astonishing accuracy, particularly a dreadful one in October, by which much destruction of life and property took place at sea. Dr. Merryweather proceeds, in his pamphlet, to inform us that the peculiar habits of the leech being brought under his notice, and its restlessness previous to the bursting of a storm, he began to pay particular attention to their movements, interfering as little as possible with their habits, in the hopes of establishing a certain means of indicating any coming atmospheric change. In the first of his experiments a number of leeches were kept separately, under similar circumstances, to ascertain if they gave simultaneous indications of thunder. This was, however, found not to be the case, as some were much more prophetic than others, and some nearly stupid. Cowper asserted that the leech is affected by thunder; but Dr. Merryweather has proved that it is the electro-magnetic state of the atmosphere, previous to a thunder-storm, which acts upon it, and by which he can foretel all storms whatever, though even taking place at many miles distant. He next placed twelve leeches in twelve pint glass bottles, 3 inches diameter, and 7 inches high, placed in a circle, in order that the animals might see each other; and, observing their movements, at length detached those movements which more immediately appertained to meteorology. A metallic tube of peculiar form, coated with shellac, was inserted into each neck of the bottles, and into this each leech would enter if a storm was preparing. To know if the leeches entered the tube during the observer's absence, a bell was erected surrounded by 12 hammers, and, by an arrangement of wires and springs, and a small piece of whalebone across the mouth of the tube, no leech can enter without ringing the bell; and Dr. Merryweather still hopes to effect an arrangement by which the storm-foretelling motives of the leeches will be self-registered. Thus have we an instrument worked solely by animal instinct, which, although at present it only foretels *thunder storms*, its inventor is following up his researches, and has almost satisfied himself that he is on the eve of being able to foretel rain. This beautiful instrument must we think, prove a source of great attraction at the Exhibition.

THE DUCHY OF CORNWALL.—The total revenue of the Duchy of Cornwall, for the year ending Dec. 31st, 1850, was 60,052*l.*, composed of the following items:—Balance remaining at bankers' to credit of account of the council of H.R.H. the Prince of Wales on Dec. 31st, 1849, 5254*l.*; rents and arrears, 22,523*l.*; produce of royalties of coal mines in the county of Somerset, 1759*l.*; royalties and reservations of dues and rents of mines and quarries in the counties of Cornwall and Devon, exclusive of the water of Tamar, 2180*l.*; profits of wood sales, 168*l.*; compensation in lieu of tin coinage duties, post groats and white rents, 15,741*l.*; dividends on stock, 1144*l.*; repayment of advances, 11,278*l.* The expenditure consists of payments made to His Royal Highness's use, 38,675*l.*; salaries of officers, &c., 5901*l.*; superannuation allowances and annuities, 2852*l.*; donations and charities, 845*l.*; law charges, &c., 3263*l.*; leaving balance in hand, 8609*l.*

HOLLOWAY'S PILLS AN EXCELLENT REMEDY FOR COUGHS, COLDS, PULMONARY COMPLAINTS, AND OTHER DISEASES OF THE CHEST.—Mr. J. C. Rheinhardt, chemist, of Hull, states that Mr. Stinger, formerly of the Hull Glass-Works, was pronounced to be far gone in consumption: the medical men had given him up as incurable. On seeing Holloway's Pills advertised, he thought he would give them a trial; and after taking a few boxes, his cough abated, his flesh became firm, his appetite improved, and now his health is completely restored. This admirable medicine is a certain remedy for the most obstinate cases of asthma, old coughs, recent colds, and all diseases of the chest and lungs.—Sold by all druggists, and at Prof. Holloway's Establishment, 244, Strand.

Original Correspondence.

GLANCES AT THE GLOOMY STATE OF THE GWENNAP MINES.

SIR,—In the "third glance," by "Argus," recorded in your Journal of the 22d ult., there are a few observations which seem to call for a reply from me. In the first place, allow me to correct three typo-orthographical errors in the mines of which I gave a list. For Wheal Yeoland, *read* Wheal Gorland; for Rustinthal, *read* Penstruthal; and for Cathedrae, *read* Cathedral Mine. By giving the true spelling, "Argus" will be able to identify the mines. That writer says—"What I wish to notice is the very cool manner in which he (*i.e.*, myself) plans out the 'knocking' of the United Mines and the other mines adjacent." Now, although, in another respect, I am a "planner," this plan is one of "Argus's" own draught, and contained, for the most part, in the first of his three "glances." I confess that, having that laid before me in the Journal, I took the liberty to adopt it as a plan which was likely to be executed in the suspension of workings in the "United Mines and other mines adjacent." The gloom that pervaded the mind of "Argus" when he wrote his first letter, was so expansive that it reached me, so that I could not see, under the circumstances described by him, how the mines in question could be worked much longer. The main difference between "Argus" and myself is in the course to be taken, if within the present month no valuable discovery should be made, whereby the expense of the mines may be met. He thinks that the best plan would be to consolidate all the mines which are so circumstanced; that the water from one, when stopped, would flow into the adjacent mine, if working, so as to render such working too expensive to be continued. In this respect I differed from him, and asked the question—"If the mines will not pay respectively, what will make them pay collectively?—the mere union cannot do it." I suggested, as a better course, that in case it became necessary to stop the United Mines, the machinery might be removed to Treskerby, &c., to work that "string of mines"—if it be true, as reported, that Messrs. Taylor and Co. have taken those setts. "Argus" thinks it odd that I should suggest the consolidation of Treskerby, Wheal Chance, North Downs, Wheal Busy, &c., after their abandonment, on account of poverty, in 1829. I will assign my reason for supposing that, although those mines would not pay then, worked separately, as some of them were, they might be made to pay in a consolidated form in 1851. My reason, then, is this—the great diminution that has taken place in the prices of mining materials and labour since 1829. I meant to subjoin a tabular statement of the comparative prices of the chief articles of consumption in those years, but a friend to whom I applied for them not having furnished them, I shall merely refer to the subject, by stating that a considerable reduction in the price of most articles used in mines has taken place since 1829. I think I may say in all articles, except timber. In the price of labour a reduction of about 33 per cent. has taken place. In addition to those reductions, a very important saving has been effected by the recent improvements in steam-engines, whereby a much greater duty is performed. There is also a saving by the substitution of steam-whims for the horse-whims; there is also a considerable saving by the adoption of the crushing or grinding machines, instead of the old "bucking" mode of reducing the ores to the marketable size.

A friend, whom I met in Truro a few days ago, asked me if I was the wicked "Argus," who had been writing in the *Mining Journal*? I said "No—for he had been writing about me." When I informed him that I had to show that mines may be worked more economically now than in 1829, he said that he considered that there was a saving of about one-third of the expense. There is one item which I had just forgotten—that is the saving in the account-house, effected partly by the temperate habits of the agents and others there assembled, and partly by the limited amount allowed those gentlemen to make them "comfortable."

These are the circumstances which appear sufficient to justify my suggestion for the united working of all the mines between North Downs Mine and Chacewater. "Argus" thinks, however, that I had "a wish that was parent to the thought"—"in the hope of getting a surveying job." I can assure him that I had no such thought at the time; but now that "Argus" has put that thought into my mind, I confess that I should like the "job," although I am not in want of it just now.

"Argus" alludes to the covenant contained in some mine leases, by virtue of which the lords are to have the opportunity, before the stopping of a mine, of taking the materials in a valuation made by two indifferent persons, &c. I was aware of this covenant, but of the exercise of it, in a single instance, I was not aware, notwithstanding my residence all my lifetime in the vicinity of mines. The covenant is almost nugatory—in Cornwall, at least—for what adventurers would not gladly accept for the materials a price so determined, if they wished to sell? And what lords would undertake the prosecution of a mine after its abandonment by a company? I am confident that the lords of Corgam Manor will not do it; therefore, if Messrs. Taylor and Co. have any wish to remove the materials to any other mine, I think that they will find no difficulty in doing it, so far as the lords are concerned. I well remember the case of the Consolidated Mines; how, in 1839, the late adventurers were dispossessed; but their term of 21 years had expired, and those mines were rich at the time. The lords who objected to renew the lease might take advantage of the covenant to put their friends in possession of it; but another such instance I cannot adduce, nor, I believe, can "Argus."

The lords, who have been in receipt of a large revenue from the United and Consolidated Mines for the last 30 years, are naturally awake to the advantage of a continued prosecution of the works, and to see them stirring on the present occasion is what might be expected. I should be sorry to see that revenue cut off, especially as the rent of land is so reduced; but it would be absurd to suppose that the adventurers would continue to work for any long time at a loss. If the Consols and Poldice Mines are poor, as well as the United Mines, and cannot be worked but with considerable loss, is it probable that the lords would advance the amount requisite to purchase all the machinery, &c., at the United Mines, merely to prop up a losing concern?

There is another difficulty pointed out by "Argus," as to the removal of the machinery, &c. He says that "there are no less than five sets of executors representing the interest of deceased proprietors—all these cannot consent to a removal, if any of them do." Now, I am persuaded that no executor would be so unfaithful to his trust as to refuse a fair price, such as valuers' would give, and prefer the low price at which materials are usually sold at public auctions.

As "Argus," from his anonymous character as a writer, has an advantage over me, in that he can (from behind a fence, as it were) hit me when I cannot hit him, I have to thank him for the very limited amount of personality contained in the "third glance;" but I must refer to a word of his, as to the "slowness of my planning." I conjecture that he alludes to the slow issue of my maps of mining districts, which are forthcoming (some of which are published). Now, he must not suppose that I employ my time exclusively in that kind of work—a work which I do only when nothing better is in hand: and sometimes after my draft is ready—Camborne and Illogan, for instance—the printer keeps his part of the work in hand a long time. This slowness, however, is only temporary, for I am making arrangements for accelerating the publication at Truro of all the unpublished mining districts.

I am as perfectly disinterested as "Argus" in the question of working or stopping of the mines in Gwennap. I have no wish that they should stop—my wish is rather the contrary; but when mines are 300 fathoms deep, and cannot be wrought but at a great sacrifice, who would advise a continuance? I think that both lords and adventurers are acting in a thorough business-like manner—the former beginning to lose money, intend to stop; the latter, apprehending cessation of dues, say "don't be hasty." R. SYMONS.

Parade, Truro, April 2.

SIR,—Be so good as to add, as a postscript to my letter, in reply to "Argus," the following fact in favour of the working of the Treskerby and contiguous mines—viz.: *their comparative shallowness*; the depth being only about 120 fms., if my informant is correct; whereas the depth of the United and Consols is about 300 fathoms. I believe that the monthly loss, immediately before their stoppage in 1829, even under the then high prices of supplies, was not large. Under the present prices, I think the mines would yield a profit, supposing no discovery were made—a circumstance not probable. I hope that no reader of your Journal will attribute to me that which I do not feel—a spirit of partisanship. I have no interest one way or the other, either in stopping the United or working Treskerby; and I can truly say that, prior to my last letter, I had no *conversation* with any person on the subject of those mines; and as to *letters*, I have never written or received one on the subject, except what you have seen and printed. I find from a friend that a very strong feeling exists on the subject of this discussion. It may be, therefore, that my letters have given, or will give, offence to some narrow-minded persons; for narrow indeed must be the mind of that man who will take offence at such things. As I am sure that no man of good sense will be offended, I regard not consequences.

Truro, April 8. R. SYMONS.

DEVON GREAT CONSOLS MODEL WATER-WHEELS.

SIR,—I must trouble you with a few words in reply to "A Real Shareholder," and Mr. N. Smith's letters of last week. With regard to the "real motive" I may state that I should not have troubled you on the subject, but from seeing your account of the model water-wheel, &c. In a model I should look for something new—an improvement worthy of being followed up elsewhere—but in this there is nothing new. I did not say the wheels themselves are of "iron." Is there no more iron used in these wheels than 100 years ago? I have no fault to find with the appropriation of the hitherto neglected stream, except I were to ask *why it was not done earlier?* nor as to the expense laid out by the company, nor errors in workmanship; I wish to remove such impressions. It is that the improvements of the age are not carried out. The steam-engine, in principle, remains as Watt left it, but instead of 20,000,000 we have now 100,000,000. The ship is the same in principle, but we make a passage now in a quarter of the time we did 100 years since. I trust some good will come out of this correspondence, and that the water-wheel may become what it ought to be.—A SHAREHOLDER: *City, April 8.*

KENMARE AND WEST OF IRELAND COPPER AND SILVER-LEAD MINING COMPANY.

SIR,—Observing in your last week's impression a letter from a correspondent and some comments of your own, with reference to the above company, I beg to furnish the following facts, which I feel sure you will give place to in this week's Journal. The amount required for the grant, and the existing mining plant, is a trifle above the estimate made by Capt. W. Thomas, a gentleman who has more than once inspected the mines, and after providing for which there will remain a surplus, or working capital, of about 15,000*l.*; and as the directors hope to extend their operations in the district, I think you will agree with them that such a capital cannot be considered excessive; but should it turn out to be greater than will be required, I trust that the high standing of the directors will afford a sufficient guarrantee to the shareholders that it will not be misapplied.

When I tell you that over 300,000 shares were applied for, and that a great number of the applicants were practical miners, many of them personally acquainted with the district, and gentlemen connected with Ireland and interested in all that concerns its welfare, it affords a significant proof of the estimation in which the undertaking is held by the public generally: and your own knowledge of the district will enable you to judge whether, when energetically worked as it will be, this property will not become highly productive and remunerative to the shareholders, and a boon to the poor of the neighbourhood and its residents generally, as well as a precursor to the development of the mining and other interests of that district of Ireland which, from local causes, have so long lain dormant.

I am glad to have the opportunity of giving you this explanation, to the accuracy of which I pledge myself; and as I am informed that interested parties have endeavoured to circulate some absurd reports, to the effect that the company has not the perfect right and title claimed, in contradiction to these, and all such like reports, I need only say the Parliamentary grant from the Incumbered Estates' Commissioners may be seen, and any and every other particular relating to the undertaking obtained, by all persons who, not from idle curiosity, will apply at my office. EDWARD MANBY,

Lombard-street Chambers, April 10. Solicitor and Secretary *pro tem.*

PERRAN ST GEORGE MINES.

SIR,—I have been looking at Mr. Ennor's letter, to see if there is anything that needs reply from me; and I am inclined to think there is not, especially as he has not answered my last, upon the vacant plea that I am bound to disclose my name, in place of the one I have used for many years when corresponding with the press, to whom I have invariably given it, and I maintain that is all that is necessary. "What's in a name"—had I denominated myself the "Mr. Briggs," or "Brown, Jones, or Robinson," probably Mr. Ennor's curiosity would have been satisfied; but I contend that he, at all events, has no right to "learn the secrets of the prison house"—to ask of, or expect it from me. He found "Argus" in your columns offering some corrections to a work that had been "twice laid" before the public, and which doubtless had met his eye as well as mine. Instead of wishing to appear in print, I let it pass, expecting some mining agent, such as Mr. Ennor, or some one with similar *ener*-gies, would have put the matter right. At last, finding they kept back their knowledge, as though it were "hidden under a bushel," I ventured forth, and Mr. Ennor entered a volunteer into the controversy; therefore he must take me as he found me—"Argus." I neither offered, or intended offence to any one, nor have I any prospect of gain—then why am I to indulge "idle curiosity," or submit my name to be dragged before your numerous readers, who doubtless fully appreciate my good intentions under the cognomen of "Argus," of Truro, as though it were Jim Ning King, of the Chinese Junk?

I want neither "measurements, plans, or explanations detrimental" to any one—I asked for no such things, but for a "*mere sketch* upon tracing paper;" and as, doubtless, plans are kept at Perran St. George, five minutes would "furnish forth" all I did ask for, which the Journal would readily (I conceive) give insertion to—at all events, it would reach my hands. If Capt. Pill sends it, well and good; if not, Mr. Henwood's version will still stand thus—

There is a small patch of granite at Clegga-point, but the principal rock is slate, which is more or less micaceous, even at considerable distances from the granite, but still further from it becomes gradually calcareous. Elvan courses are numerous throughout the district, and there are some of them in the calcareous tracts also.

Referring generally to the last paragraph in my letter of 24th ult., I conclude.

Truro, April 7. ARGUS.

CASSANDRA ANNE MINE.

SIR,—Your correspondent, W. B. Call, Esq., in his remarks on the above (so-called) MINE, in your last Journal, is doing infinite service to the public, and to what is called "legitimate" (meaning honest) mining, by the *exposé* of the little pretensions this concern has to be considered of any value whatever; the only wonder arising out of Mr. Call's statement being, that such a job should have remained unexposed a single day. I perceive that this particular piece of ground, with its fine name, is a companion to another mine, without quite so euphonic a cognomen; but—

"What's in a name?
The rose by any other name would smell as sweet."

It is called WHEAL TOM, the 2000 shares in which are 5*l.* paid, and quoted as selling at 9*l.* to 10*l.* The reports are respectable, and there are, I am told, some lodes in the sett; so let it be hoped that, before the 4300*l.* cash now in hand is expended, the adventurers in WHEAL TOM will be greeted with dividends. Let it be understood, I have nothing to say against this mine; but its companionship with the Cassandra Anne looks suspicious, and does not add much to its merits.

It is to be wished that gentlemen, residing in the immediate neighbourhood of new mining setts, would imitate the noble example of Mr. Call, and when they find a palpable case, like that of Cassandra (with its "half-dozen costeaning pits, in one of which there is a small branch of flookan mixed with rubble, and the rock below a hard dark-coloured slate"), not to hesitate publishing it; and they may rely upon the thanks of, not only all would-be adventurers in mines, but of that large section of the public who are anxious for upholding the British character for fair and upright dealing.—MENTOR: *London, April 11.*

THE CARDIGANSHIRE MINES.

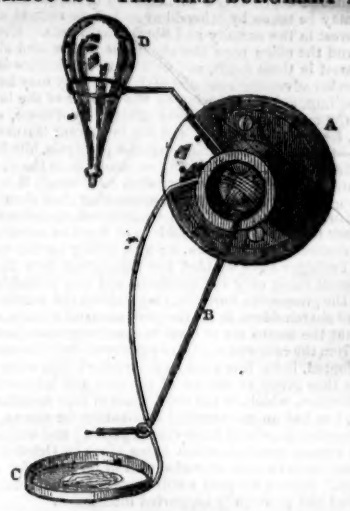
The following observations may have a wider scope than appears to be embraced under this head, but as these mines are likely to furnish matter for some more occasional letters, the title is retained. The object of the present, and probably some more, is to make known the nature and value of the Welsh ores, and the different stages through which they pass before they leave the smelter's hands in a metallic state. In each condition there may exist more or less abuse with respect to the application of capital, of which particular instances may, perhaps, be discovered when the business becomes more generally understood. At all events, capitalists will thus have the power, if they have the inclination, of making themselves thoroughly acquainted with the steps which ensure either their success or their misfortune; and these, it is conceived, are points deserving consideration. At a time, therefore, like the present, when mining adventures are being taken up with so much avidity, and men, whose only qualification for such enterprises is a command of money, courageously launch their fortunes on the perilous sea of such speculations, information tending to throw light on any branch of this subject, must be more or less beneficial.

It is unnecessary to describe lead, but it will be useful to notice some of its ores, and their characteristic differences. The sort usually found here is, when granular, called steel-ore, and when breaking into large smooth-surfaced polished cubes, potter's ore—because the latter is employed to glaze pottery, and both come under the general denomination of galena. Silver is found in all kinds, but in some so very slightly as almost to escape observation. Those varieties having a blackish lead-grey colour are considered to contain the greatest quantity, and not the pale sort, as has been often imagined. The crystallisation will assist us in forming an opinion of the relative value of lead ores in this respect; for it has been observed that the cubical is the poorest, the cube truncated on the angles the richest, and the octahedral and prismatic are those which are most frequently associated with rich silver ores. The quantity of silver in Cardiganshire varies from 1 to 80 ozs. to the ton of ore, but the more common amounts are found to be between 20 and 40 ozs. In estimating the value, it must be borne in mind that from 6 to 7 ozs. are allowed towards the cost of extracting, and, therefore, only as much as remains over and above this will be paid for by the purchaser of the lead ore. The produce for lead is somewhat deteriorated by the presence of much silver. Most of the ores containing not more than 5 ozs of the latter will assay 78 per cent., or nearly so, for lead, which is tantamount to almost 16 cwts. of pure metal from 1 ton of the ore. Up to the time of the passing of the Act of the 6th of William and Mary, all mines which were sufficiently rich in silver to "countervaile the cost of extracting it, or more worth than the base metal spent in the refining it," belonged to the Crown by prerogative, and were, therefore, called "mines royal," the others being denominated "poor mines."

Besides galena, there are other kinds of lead ore found here, but not commonly. Of these a red ore is very curious as well as rare. It occurs in several mines in sufficient quantity to give a sort of chocolate colour to the whole produce when cleaned for sale, but no lumps have been seen in the lode large enough to constitute even a specimen. Notwithstanding this, a solid mass, weighing about 50 lbs., was found as a boulder in the soil on a mountain near Llandewi Brevi, which argues there must be somewhere in that neighbourhood a pretty strong vein of it.

White carbonate of lead is more common, though not in very large quantities. It occurs in thin plates and acicular points, stuck on their edges and ends on the veinstone forming the sides of cavities in some lodes. It sometimes sparkles with a brightness inferior only to that of the diamond, and it may safely be pronounced the most beautiful cabinet specimen which this country supplies.

THE "PYRACOUST" FIRE AND BURGLARY ALARUM.



This simple and effective apparatus is intended, as its name imports, to give instantaneous notice in case of fire or burglary; and from the marked increase which has recently taken place in these serious casualties, we have little doubt that the public will not be slow to avail themselves of the advantages which it offers. As the instrument is not dependant for its action upon the operation of mere mechanism, it is next to impossible that it can get out of order, and, when once fixed, it becomes a silent and unobtrusive, but ever watchful, guardian over life, house, and property. We may here observe that the proper position of the alarum is within a few inches of the ceiling, and our readers will readily understand its principle by a reference to the annexed diagram. A is a wooden bracket, carrying an open case, to the bottom of which is fixed a small maroon, in communication with the conductor, B; the end of the conductor passes through a loop in the adjoining wire, and projects over the stand, or dish, C; in the latter is placed a small quantity of combustible mixture, and immediately over this stands the glass vessel, D, with its small end pointing downwards; the lower extremity of the vessel is plugged with wax, and it also contains a few drops of liquid. Now, the action of the apparatus is as follows:—After remaining, perhaps, for years a perfectly dead letter (as we shall hope it will do in most instances), a fire chances to break out in the apartment in which it is placed; the hot air and products of combustion instantly ascend to the top of the room, and diffuse themselves in a uniform stratum, so that wherever the alarum is placed they are sure to come in contact with it. When, therefore, the temperature at this point has risen to the moderate extent of 150° only—which *experiment* has shown will take place *almost immediately*, and before the lower atmosphere is scarcely warm—the small portion of wax with which the vessel, D, is sealed liquifies and drops, followed by the supernatant liquid, which latter, immediately on coming in contact with the chemical composition in C, ignites it, and fires the conductor and maroon. The result is a powerful detonation, sufficiently loud to be heard in every part of the house, and to arouse the inmates, whether sleeping or waking, to a sense of their danger It is necessary to observe, that beyond the aural violence of the detonation, it is altogether unattended by any evil result. It can neither produce fire of itself nor augment it; nor can it inflict the slightest injury upon any one who may chance to stand in its immediate vicinity at the moment of ignition. In fact, it is perfectly safe from danger of any kind; and though the loudness of the report may possibly be an objection with some timid people, it must be borne in mind that the *apparatus is perfectly quiescent*, except in cases of extreme danger, when instant activity is requisite for personal preservation from a horrible death; and surely under such a contingency it is better to confide our safety to an ever-watchful and loud-mouthed bull-dog, such as this, than to trust to the chance of an alarm from without, which frequently arrives too late. The police cannot be in every quarter of their beat at one and the same time; and, therefore, notwithstanding their laudable and well-known exertions in the saving of life and property when such accidents occur, they generally do not notice the outbreak of a fire until it has gained a considerable ascendency, and escape is most difficult, and, in many cases, impossible: a period of even five minutes is everything under these circumstances.

It is essential to notice, that in fixing this apparatus in any room having a low ceiling, it should be protected from external injury, merely to avoid the possibility of a false alarm. It is also preferable to place it in a situation remote from the fire. The application of the invention to the detection of burglaries shall be noticed in the next number of our Journal.

This ingenious contrivance, we may add, originated with Mr. Isham Baggs, a gentleman with whom our readers are familiar, from his numerous scientific contributions.

THE TRAFALGAR LIFE ASSURANCE ASSOCIATION.

The great development of the principles of life assurance, and the vast increase in the number of offices during the past 25 years, is a tolerably certain proof of their profitable nature, and of their appreciation by the public. In the report of the annual meeting of the Professional Life Assurance Company, in the *Mining Journal* of the 22d March, we endeavoured to show the liberal policy on which its principles were based, and particularly noticed one peculiar feature—that of providing for the assured while living, in case of adversity, a feature previously adopted by no other assurance company. Our attention has since been called to another assurance association, having the above title, founded on a still broader basis, and approaching far nearer than any other to the standard of that perfection which it is possible for human institutions to reach; embodying the very fundamental principles of the system, and which, even at its outset, has been patronized in a most extraordinary manner by the public, showing that the views of its promoters are sound, and are duly appreciated. In their prospectus the directors demonstrate by facts, examples, and clear arithmetical processes, that there is nothing visionary, or even theoretical, in the plan they have propounded. Instead of hoarding up accumulated profits until they rise to such a magnitude as to be positively unwieldy and burdensome, the Trafalgar, while they not only provide for *probable* losses, but secure themselves against the possibility of extravagant ones, devote one clear tenth, at every division, to the purpose of creating a permanent annuity fund, for the benefit, during life, of any share or policy holder who, from any cause, may become reduced in circumstances, and extending afterwards to their children and grandchildren, thus securing to them, in return for their investment, an absolute provision, should they require it. Another tenth is also devoted for creating a permanent educational, apprenticeship fee, or endowment fund, for the use and benefit of the children of a share or policy holder, should they require such assistance. By this plan life assurance is stripped of the "reversionary" character, hitherto its sole attribute, and rendered what it ought to be—an assurance against other accidents of chance than death, as those of uncertain fortune and adversity while living; and there is little doubt but that the adoption of these plans will render the principle far more popular, and bring it more generally into public notice than any other mode of practice yet propounded. It is a startling fact that, with 200 assurance offices, the number of lives insured throughout Great Britain, Ireland, the British Colonies and possessions, and the entire continent of Europe, little exceeds 200,000, and a large proportion of these have not become assured even for a reversion to survivors, but as subsidiary security for some pecuniary obligations of their own, facts showing how partially the advantages of life assurance have been embraced, but which the plan of making the funds subservient to a man's own wants, as practiced by this office, will largely extend. Notwithstanding the hitherto restricted number of policy holders, large sums of money have been realised by all the existing offices: one declares the profits on 44 years to be 743,000*l.*; another, on 28 years, 770,000*l.*; and another, on 16 years, 207,000*l.*, all of which have been suffered to pass away without leaving one satisfactory token of usefulness or beneficence behind them; while, had they appropriated a definite sum periodically, as adopted by the Trafalgar, the first would have had an annuity fund of 74,300*l.*, which, invested at 5 per cent., would produce an annual income of 3715*l.*, sufficient to grant 75 annuities of 50*l.* each per annum to distressed assurers or shareholders, and an educational or apprentice fee fund, to the same amount, sufficient to provide for 370 children, and the others in like proportion. Some of the old offices have realised much greater profits than these. The entire plan of division of profits by the Trafalgar will be—to the assured, either as addition to policy, reduction of premium, or ready money bonus, 50 per cent.; annuity fund for shareholders or assurers, 10 per cent.; education, apprentice fee, or endowment fund, 10 per cent.; a fund for purchasing up the shares at market price, and thus convert eventually the association into a mutual one, 10 per cent.; and to the shareholders, 20 per cent. Thus it will be seen that parties becoming assurers, or

shareholders will not be deprived of a participation in the funds. The interest in their policies may be taken by others, but no act, no reverse of fortune, can remove their interest in the annuity and educational funds. Even supposing an assurer dies, and the office pays the claim, the widow and children would still have an interest in these funds, and entitled to participate in them, if reduced. Some further advantages peculiar to this company may be enumerated; in all cases of duelling, suicide, or dying by the finisher of the law, the claims will be paid, or the money returned; lives affected by disease, such as gout, rupture, asthma, &c., may be assured, and one important feature deserves notice particularly—that of granting policies against paralysis, blindness, insanity, accidents, and every other affliction, bodily or mentally, in the event of a party becoming absolutely disabled and incapacitated. Although it is necessary for the successful progress of any assurance company that they should have means to fall back upon in case of any unforeseen, unexpected, or extraordinary losses, it is only necessary that the means should be at hand to obtain the requisite amount, should circumstances require it; and, acting on this conviction, the directors of the Trafalgar have divided the association into 25,000 shares of 10*l*. each, the deposit being only 10s. per share, and it is probable no more will be required. In the prospectus, however, they publish the names and addresses of upwards of 350 shareholders, in all the professions of society, as a guarantee to the assured that the means are at hand to meet any casualties which might arise, although, from the care and vigilance exercised, and the security inherent in the system adopted, little fear need be entertained that such will ever take place. We have thus given an outline of the new and interesting features of this embryo institution, which, in the short space of four months from the date of its formation, has had an unexampled application for shares, and issued an unprecedented number of policies for so short a period; and we have little doubt but, by the first annual meeting, which takes place in October next, its progress will be found to have even exceeded that of its *examplar* and prototype, the "Professional," having adopted a still more popular formula than that liberally established and powerfully supported institution.

A Compendium of British Mining.

BY J. Y. WATSON, ESQ., F.G.S.

WHEAL TREHANE SILVER-LEAD,

NEAR LISKEARD.

This mine is situate in the parish of Menheniotte, and on the same lode as Wheal Trelawny and Mary Ann. Conducted on the Cost-book System. In 256 shares, 1*l*. 5s. per share paid up—market price, 13*l*. per share. Purser, Mr. John Philp, Liskeard; agent on the mine, Captain Samuel Richards. Trehane Mine consists of two setts, the principal being held on lease for 21 shares, at 1-15th dues, from 25th March, 1846, of Mr. Thomas Kelly. For this sett a premium of 500*l*. was paid. The other sett consists of two fields belonging to the St. Germain's school, and joins the land of Mr. Kelly to the north-west; for this a premium of 100*l*. was paid, and the lease for 21 years, at 1-15th dues, is dated 1st May, 1847.

Operations were first commenced in March, 1846, in Kelly's field, and on the 7th December, of the same year, a parcel of silver-lead ore, weighing 35 tons 10 cwts., was sold at 24*l*. 13s. per ton. From this time the mine continued to progress, and up to the 28th November last has returned 647 tons 8 cwts. 2 qrs., yielding in money 12,022*l*. 15s. 5d.; and 35 tons 17 cwts. of gossan ore, which sold for 119*l*. 8s. 6d. On the 1st of March, 1847, twelve months after the commencement of the mine, the first dividend of profit, amounting to 1*l*. per share, was made; and up to 28th November, 1848, the profits divided were 2752*l*., or 10*l*. 15s. per share. In 1849, the dividends paid amounted to 10*l*. 10s. per share, 2688*l*.; in 1850, 3*l*. 10s. per share, 896*l*.—making a total of 6,336*l*., or 24*l*. 15s. per share on a paid-up capital of 1*l*. 5s. The falling off in dividends during 1850 was owing to the erection of a steam-engine, and other necessary works, all of which have been paid for without any call being made upon the shareholders, and it is hoped dividends will be resumed ere long. Previous to the erection of the engine, the water was pumped from the mine by means of flat-rods from Trelawny engine, for which, and for the use of water for dressing the ores, nearly 400*l*. per annum was paid.

The land comprised in the two setts extends from north to south about 200 fathoms, and from east to west above 300 fathoms. Two shafts have been sunk; and the main shaft is abuot 90 fms. deep from surface. There are several levels; the first driven was 20 fathoms from surface. The greatest length of level opened is at the 30, which is upwards of 100 fms. long. Many of the upper levels have been driven nearly to the boundary, the lode passing through the narrowest part of the sett; however, it is calculated that, according to its underlie, it will continue in the sett considerably deeper than 100 fathoms, though every level would become shorter and shorter, and the lode eventually pass into Trelawny.

About 100 miners and labourers are employed, besides boys and girls engaged in dressing the ore, of which about 25 tons per month are raised.

The main bearing of the lode is nearly true north and south, and passes through a soft blue killas; it contains, besides silver-lead ore, mundic, fluor, and quartzose spar, hornstone, barytes, and carbonate of iron. The ore is very rich for silver, and averaging in price more than 20*l*. per ton. From the main shaft a cross-cut was driven in the 30 fm. level for many fathoms, in search of a parallel lode, believed to be in the sett; but it was never found.

THE MINING EXCHANGE—(*From a Correspondent*).—What was so imperatively called for by the public, and those actively engaged in feeding the increased demand for mining shares, has, we are happy to say, been realised—a Mining Share Exchange having been established in a most central and convenient situation (but still of a temporary character as to the *locale*), over the Jamaica Coffee-house, St. Michael's-alley, Cornhill, and on Monday last the agents and dealers met, for the first time, to transact business. This is an event in the mining world worthy of special notice, for its prospective benefits to one class of British industrial productions can scarcely be over-rated. Sometimes important events acquire a particular identity, and it may be mentioned that on the same spot where the Mining Exchange is now established, the first cup of coffee was publicly made and sold in England—at least, we have the authority of Mr. Dickens for stating that one "Pasqua Rosee begun the business in St. Michael's-alley, Cornhill, at the sign of his own head." We can imagine the transition of Pasca Rosee's Head to the Jamaica Coffee-house, where the West India berry subsequently found a market. The rooms are light and convenient, and there is a picture of "twa dogs," one of which, in the attempt to abduct a bone from the other (who is asleep), justifies the motto—"Nothing venture, nothing have," and is not inappropriate to mining pursuits.

WANDLE WATER AND SEWAGE COMPANY.—It would be superfluous to dwell on the great importance, both in a sanitary and moral point of view, of a plentiful supply to largely populated places of good water, and also of a complete and efficient system of sewage; nor is the knowledge of the fact confined to a few, that the inhabitants south of London have been, and still are, supplied with water totally inadequate to their wants as to quantity, and entirely unfit for use for culinary or sanitary purposes. The objects of the Wandle Water Company are to supply the public south of London with a constant supply of pure and wholesome water; to supply public bodies or individual consumers at constant and high service; to provide public baths and washhouses on moderate terms; and to secure a complete and independent system of sewage throughout the entire district drained by the Wandle. The water of this river is known to be the most pure of any in the neighbourhood of London, particularly at Wandsworth, where it is proposed to take the supply raised to reservoirs on Wimbledon Common, 160 feet above Trinity high-water mark, a sufficient elevation for high service to any building in the district to be supplied. The capital is 300,000*l*., in 30,000 shares of 10*l*. each, on which a clear yearly dividend is calculated of 7 per cent., on fair and moderate estimates.

The annual report of the Scottish Amicable Mutual Life Assurance Society, showing its unprecedented success, may be obtained at the offices, 43 and 44, Lombard-street, London, or from any of the provincial agencies. The following is the new business of the society, as reported to the annual meeting:—

New Business, 1850.	Capital sums assured	£356,367	0	0
	Annual premiums	12,273	0	8
	Single premiums	4,962	12	9
	Number of policies, 944.			
Net increase, 1850, to total business, deducting for policies emerged, forfeited, surrendered, & not taken up.	Capital sums assured	£272,354	9	0
	Annual premiums	8,764	15	0
	Single premiums	4,962	12	9
	Number of policies, 809.			

Falmouth—Mr. J. Hallamore, Cornish Bank | *Truro*—Mr. R. Rouse
Camborne—Mr. T. Davey, jun., Tuckingmill | *St. Ives*—Mr. W. Roberts
Penzance—Mr. Richard Hugo | *Chacewater*—Mr. Richard Harvey
Helston—Mr. Henry Rogers, solicitor | *Redruth*—Mr. A. Harris

Applications for agencies will be entertained. 77

Several models of locomotives have been sent to the Austrian Government, to compete for the prize of 20,000 ducats for an engine capable of ascending the railway which passes over Mont Semmering.

Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—There is no change to notice in Field's engine-shaft, sinking under the 80 fm. level. The lode in the 80 is very much improved; the orey part east is 3 ft. wide, and, from appearances, it is standing north of the level going west, and may be considered worth from 20*l*. to 30*l*. per fm. We have four men rising over the back against No. 1 winze; as soon as this rise is communicated to the winze, these men will be put to drive west, to prove its western course—we consider this looking very cheering. The lode in the 70 is 10 ft. wide, 3 feet of which is worth from 40*l*. to 50*l*. per fm., the remaining part is principally capels, intermixed with copper ore. The lode in Wyld's shaft, sinking under the 60 fm. level, is from 3 to 4 ft. wide, producing from ½ to 1 ton per fm. There is no other change to speak of in these mines since the last report.

BEDFORD UNITED.—In driving east of the engine-shaft, in the 115 fm level, the lode is 2 ft. wide, composed of capel, spar, and mundic, with some ore. In the 115, east of Andrew's winze, the lode is 2 ft. wide, and worth 2 tons per fm.; west in the same level we are cutting through the lode, and have driven 2½ ft., without reaching the north wall; the lode is yielding saving work, and very kindly. In the 103 east the lode is 4 ft. wide, the orey part being 2 ft. wide, and worth 4 tons per fm. Parker's winze in the bottom of this level is suspended until the 115 is further advanced, when we hope to let down the water, and be able to sink at less cost. In the 90 east the lode is 2½ ft. wide, producing good saving work, and very promising. The 80 has been driven by the side of the lode during the past month. These ends (80 and 90) are suspended, and the men placed to sink and rise, to effect a communication for better ventilation. In the 47 no lode has been cut; we are driving north on the course of the slide. The pitch in the back of the 80, set last month at 10s., has greatly improved, and is now set at 3s. in 1*l*. The other pitches are looking well, particularly in the back of the 103, where there are three working, at an average tribute of 2s. 11d. in 1*l*.

BODMIN CONSOLS.—The 13 fm. level has hardly entered the northern ground before it is twice the value of the adit above, and the shoot of ground is 60 fms. in length. The shaft is down to the 26 fathom level, and the cross-cut is in a very kindly blue stratum. I hope before the 13th the lode will be cut; should it be no richer than in the 13 fm. level, we may contemplate that we have about 20,000*l*. to 30,000*l*. of lead ore in sight.

BODMIN WHEAL MARY CONSOLS.—The lode in the western winze (No. 1 lode) is improving; the winze appears to be entering the course of ore discovered 15 fms. east. The lode in Spargoe's drift is 3 ft. wide, good saving work. The 10 fm. level, on No. 1 lode, is getting more regular, and producing good stones of ore. The two plats being now cut in the 20 fathom level, the men are put to drive east and west on No. 3 lode—good saving work. The pitches on No. 3 lode are as last reported; tributers offer to take pitches upon this lode, to sink from the 10 to the 20 fm. level. We intend to open on the lode, in the 20 fm. level, before setting any. The dressing floor being too small, we have this week increased its size. The 50-inch cylinder engine is to go to work on Monday next.

BORINGDON PARK.—Mr. Arthur Dean, C.E., in a report, dated the 4th inst., says—"I have looked over this mine, and find it to be a remarkably fine mineral property. The sett, which is very extensive, is situate entirely upon the upper or lead-bearing killas beds of the Tavistock and Plymouth district, and it is not probable that any very large quantities of ores, other than those of lead, will be found therein. The underground operations have been chiefly confined to the exploration of a powerful lead lode, bearing about 25° south of east and north of west, and underlaying south. There are several other lodes unwrought. Upon the main lode an adit level has been driven eastward 290 fms.; the lode for the first 200 fms. in the level is poor, and of no very promising appearance—the killas forming the walls there not being of good quality. About 190 fms. of this part of the adit were driven by a former company. At about 200 fms. a west underlying slide intersects the lode, and immediately east of it a complete change for the better occurs in the characters of the lode and killas; the former enlarges from 2 to 15 ft. in width, and the latter changes to a soft bluish-grey and highly-laminated kind of clay-slate, which appears to be very favourable to the deposit of lead ore in the lode. Several flookan veins and cross-courses, chiefly composed of argillaceous matter and mundic, occur in the last 90 fms.; and the portions of the lode between these intersectors become enriched with lead ore, so as to form a continuous run of orey ground, upwards of 80 fms. long, affording sites for several tribute pitches, which may be worked when the adit is made to communicate with another shaft for ventilation. The lode is composed of gossan, iron pyrites, or sulphur mundic, soft quartz, spar, flookan, and lead ore; in the end of the adit it is upwards of 12 ft. wide, and immediately adjoining an east underlying cross-course, which is 5 fms. west of the end, it contains many traces of black copper ore. The end is only 12 fms. beneath the surface. During last month the adit has been driven in the lode upwards of 24 fms.—a fact which will sufficiently show its easy character. About 80 fms. east of the present end the lode is intersected by another large east underlying cross-course, from which copious springs of water issue at the surface. All the mine water rising in the bottom of the adit is very warm, which indicates a highly-mineralised lode beneath. From the adit end, to the eastern boundary of the sett, a distance of about 250 fms., the surface indications are of a most encouraging character. Capt. Godden pointed out to me the sites for two pump-shafts which he intends to sink; they are well chosen, and will drain the cross-courses before the water issuing from them has flowed far through the lode, which will greatly reduce the cost of working. The walls of the lode are firm, and the lode itself, although soft, will stand well if kept dry. All the timber used in the mine is obtained from the wood in which the mine is situate. A leat is now cutting to bring home water for dressing purposes, and there is rough ore enough at surface to produce about 15 tons of clean ore, containing a high produce of silver. Taking into consideration the shallowness of the adit, the lode in it presents a most extraordinary appearance. In depth it will probably become firmer, and the lead ore more massive, and of larger grain. Perhaps a market might be found for the mundic, as it contains a large per centage of sulphur. The Boringdon Park Mine will advantageously sustain a comparison with any lead mine of equal extent and depth in the west of England, and I cannot entertain a doubt of its becoming, with a moderate outlay of capital, one of the richest mines in the Tavistock district.

BRYNTAIL.—The 15 fm. level is driven between 4 and 5 fms. since last report; the lode continues to yield about 3 tons per fm.; in the 15, west of the end, we have set a stope in the back, worth 35*l*. per fm. The stope in the 5 fm. level is equally as good as when last reported. We have set to six men to stope in the back of the 10 fm. level, east of Hill's rise, where the lode will produce upwards of 3 tons per fm.; and four men are driving a cross-cut from the old adit level, to intersect this shoot of ore 20 fms. west of Hill's rise. We are also opening ground west of Gill's winze, which is likely to be very productive. The men who have been clearing the old adit level are now employed in cross-cutting the lode 100 fms. east of Hill's rise, where (judging from the vast mass of barytes near the surface, and immediately over this place, in which also are found large stones of lead) we have reason to expect a good lode. Both the shallow adits are progressing favourably, and in about four months we shall open a communication between the new one and the 15 fm. level, where we have a large piece of rich ground to take away when necessary. We purpose sinking the shaft perpendicularly to the 15 fathom level, which will be our landing-place; after which we intend making an incline-plane.

BUTTERDON.—We hope to complete the plat this week, when we shall commence sinking the shaft. In cutting the plat we have discovered a branch, about 1 ft. wide, of a promising appearance, with some stones of lead. The lode in the south end is 2 ft. wide, and of just the same character as last reported. According to the present course of this end, it will intersect the branch referred to in a few fathoms more, when we may reasonably expect an improvement. In the north end the lode is 2½ ft. wide, and is improving in its appearance; as it is getting away from the slide, it now contains some good spots of lead.

CALLINGTON.—The lode in the diagonal shaft, sinking below the 125 fm. level, is 14 in. wide, producing stones of lead; the lode in the 125 south is 20 in. wide, composed of white iron, spotted with lead, opening tribute ground; the lode in the north end is 12 in. wide, producing saving work. No lode has been taken down in the winze sinking below the 112, which we set last survey day; the 112, north of the north shaft, is suspended—it being near enough to the boundary of the Holmbush Mine; the ground in the counting-house shaft, sinking below the 112, is favourable; and we expect it will intersect the lode within 2 fathoms sinking from the present time. The lode in the 125, north from the south mine, is 12 inches wide, composed of soft flookan, prian, and lead, opening tribute ground; we are exerting ourselves to the utmost to push on this level towards the above shaft. The lode in the 112, south of the south mine, has such a kindly appearance, that it induced us to resume the driving of it. The lode in the 70, south of the slide, will produce 3 cwts. of lead per fm., and is in moderate ground. Johnson's lode, in the 125 east, is 2½ ft. wide, composed of spar, mundic, a small quantity of tin, and stones of copper ore of good quality. We are preparing to drive the 50 east on the same lode by clearing out the level, &c. The Kelly Bray lode in the rise over the 70 is 3 ft. wide, producing 4 tons of ore per fm.; the stopes in the western end of the rise will produce 5 tons of ore per fathom. There is water still issuing from the 50 cross-cut, north of Kelly Bray shaft, and more branches have been met with within the last 2 feet driving; we shall extend it a little further in the same direction.

CEFN BRUNO.—The lode in the 24 fm. level east is 18 inches wide, with good stones of ore, but it is disordered by a slide, which has thrown the lode south a great deal. The lode in the adit east is 3 feet wide, very good saving work. The lode in the shaft, on the hill side, is yielding good stones of ore. The deep adit level has not yet cut the lode, but a great quantity of water is now coming out of the end.

CHYPRASE CONSOLS.—We have just cut a lode in the north cross-cut, and, as far as I can judge, it is a kindly one, with every indication of its being rich. We are in hourly expectation of cutting the second one.

COPPER BOTTOM.—The engine-shaft is now 15 ft. below the 50 fathom level. The branch of ore mentioned in my last report has passed through the shaft towards the lode. There has been no alteration in the ground in the shaft; it is congenial for copper. There has been no alteration in the 50 fm. level, driving west of engine shaft, since last reported. In the 40 fm. level, driving west of Paull's shaft, the lode is looking more promising, but is still unproductive. In the 20 fm. level, west of Paull's, we have had a channel of fair ground; the lode at present is 1 ft. wide, and contains, in the south part of it, a branch of ore, 4 in. wide. In the 10 fathom level, driving west of Stanley's shaft, the lode presents an exceedingly promising appearance; it is 2 ft. wide, producing good stones of ore. The stopes in the back of the 20 fathom level, west of the winze, are looking well; we have broken and drawn to surface about 10 tons of ore from this place. In my last report, I stated that a party of men were engaged clearing some rubbish from former workings east of the winze, sunk between the adit and 10 fm level. This has been done, and the men are now driving west about 6 fms. below the adit. We last week drew from this place about 1 ton of ore, and there is still a good branch of ore in the end. We shall commence to drive the 30 fm. level, west of flat-rod shaft, about the middle of this week. We are preparing to sink Stanley's shaft below the 10 fathom level. Having cut a little water in May's shaft, we were obliged to suspend the sinking of it for a short time. Gendall's shaft is now 7 ft. below the 10 fm. level. We expect to communicate this shaft to the 20 fm. level this month. The general appearances of the mine are much the same as when last reported.

DEVON AND COURTENAY.—Since my last report the lode in the 60 west has been slightly disordered, principally in the bottom of the end, but still producing good work. Towards and in the back of the end there is a leader of ore 2 ft. wide, which is evidently making its way towards the bottom of the end; therefore I think the disordered part will soon disappear. Besides the parts above referred to, there is a large sparry capel, with mundic and copper ore, which we are leaving for the sake of extending the levels more rapidly than we otherwise could do. I have also put eight men instead of six in this end, for the same purpose. The ground in the east end is easier for driving, otherwise there is no alteration in this part since my last report. The lode in the 30 end is composed of peach, with a great deal of mundic, and a pretty gossan and copper ore. The ground in Carthew's shaft is a little better for sinking than when last reported. At Randle shaft we have from 50 to 60 barrels of water every eight hours. We shall want the pumping machinery soon for that part of the mine.

DYFNGWM.—The engine-shaft at the lower mine has been sunk in the past two months 8 fms. 4 ft., it is now 10 fms. 1 ft. below the 32 fm. level. I expect the the shaftmen will complete the bargain by the 10th or 12th of April; I shall then set at plat to cut in the 42 fathom level, and by the time it is finished we shall not be far off the lode. You will see by the accompanying setting-list that I have suspended the working of such bargains as are at present expensive, and have set those bargains that can be worked economically. We have suspended the driving of the 32 fm. level west of whim-shaft, and intend extending the 42 fm. level west under sink steel-ore and cross-cut in that level to the great Esgairgarwaled lode, which has now so much leaderes in the adjoining mine. The distance to drive north from the Dylife lode, 35 fathoms west of sink steel-ore, will be about 55 fms., and at that point there will be about 68 fathoms of backs. We have set the roof stope, in back of 32 fm. level west of whim-shaft, which is now producing 1½ tons of lead ore per fm. In the winze sinking below the 32 fm. level no lode has been taken down since we commenced sinking; our object of letting the lode remain until the men have sunk their stent, 7 fms., is to keep up all the water we possibly can. The foot stope in the 32 fathom level, west of whim-shaft, is producing 16 cwts. of ore per fm.—stoped in the past eight weeks, 11 fms. 5 ft. 4 in., at an average price of 3*l*. 2s. 6d. per fm. The foot stope east of engine-shaft, in bottom of the 22 fm. level, is stopped, and I intend to let it remain idle until such time as it can be more conveniently worked. The railroad being now completed in the 22 fm. level, I have set it to drive west by four men, at 5*l*. per fm.; the lode is large, and producing a little lead ore. At Castle, we have six men driving south to cross-cut the lode; we fully expected to have got into it ere this, but we found the capels much wider than we expected, and a great deal of water issuing from the forebreast greatly retarded our progress in driving; however, I have not the least doubt but that we shall get into the lode by the middle of next week, when I will advise you as to the prospects. The parcel of lead ores shipped, per *Friendship*, will be sold on Thursday next. We are getting in our new crushing-mill as fast as we possibly can, but not having had one day's fine weather for three weeks our progress has been rather slow. In our dressing department we have in the past eight weeks been very much hindered in washing the ores, but now we look forward to see a great change, having our spalling houses, &c., erected, and a railroad laid down on the floor, and with a new crushing-mill expect to get on very favourably.

EAST BORINGDON PARK.—The sett extends many hundred fathoms upon the course of the Boringdon Park Mine silver-lead lode, which has been traced through it by trial pits sunk upon its back, and, wherever laid open, shows fine masses of rich lead gossan—indeed, finer can nowhere be seen; the lode is from 3 to 4 ft. wide, and traverses killas, or clay-slate beds, of excellent quality, and similar in character to those found in Boringdon Park Mine, where the lode is most productive of lead ore. There are indications of several cross-courses and other intersectors; and, in short, this sett embraces features of equal excellence with those possessed by its very promising neighbour—the difference between the two mines being simply territorial, and not physical. Several other lodes have been traced in the northern portion of the sett. The mine must be drained by steam machinery; and, if an arrangement was made with the Boringdon Park Company, one large engine would drain both mines. The indications are such as to warrant a vigorous trial; and advantage should be taken of the dry season to sink a shaft at least 20 fms., which will enable a trial of the lode to be made at that depth in more settled ground than at a shallower level. Ore may be expected in that level, as the lode in Boringdon Park Mine is rich, even at a less depth. This property is quite as valuable as the Boringdon Park Mine.

EAST SHARP TOR.—Hitchins' shaft is now 25 fms. 4 ft. below the surface, the ground in which is a little improved for sinking since my last; but without any alteration as to character.

EAST WHEAL GEORGE.—In the 23 fathom level west the branch is 6 in. wide, worth 6*l*. per fm.; it is 5 ft. from the north wall of the lode; the latter we have not cut into; the branch in the same level east is on the north wall of the lode—not as large as when last reported on, worth about 4*l*. per fm. The lode in the winze in the bottom of the 12, east of shaft, is large, and producing good stamps' work, more promising than the lode in the level above; the lode in the 12 east is without alteration, prodncing good stones of ore. The stopes in the back of the 12, west of shaft, are yielding about 8*l*. worth of ore per fathom. We sampled March ores yesterday (April 7), 24 tons 12 cwts. 1 qr., a sample of which I have sent to Swansea.

EAST WHEAL LEISURE.—The lode in the 27, west of Jewell's shaft, is 2 ft. wide, composed of soft spar and mundic. The lode in the 17 east is 1½ ft. wide, and promising; the 17 west is improving—15 in. wide, and composed of soft spar, mundic, and ore. In the 10 west, on Taylor's lode, the lode is split, and the north is expected to form a junction with the middle lode or branch, which is 20 in. wide, turning out 1½ ton of good ore per fm. Taylor's shaft, sinking below the 10 fm. level, on the south part of north lode, is yielding good stones of ore. The adit east, on south lode, is in a fine looking gossan. One stope in the back of adit, on Taylor's lode, has exceeded expectation. Three tribute pitches are set on the north lode, and the dressing of the ore is getting on as fast as possible. The mine altogether is looking very kindly.

EAST WHEAL RUSSELL.—We have not been able to do anything in the bottom of Hitchins' shaft this week, as the loading of the engine gave way; it has been replaced by loading of sufficient weight and strength to remove any fear of future accident. We hope to get her to work again to-morrow. The lode in the bottom of Hitchins' shaft, when last seen, was very fine. I brought up a few stones, which I broke on the north side of the shaft; they are superior to anything I have seen in the mine since its commencement.

ESGAIR LLEE.—The caunter lode in the deep adit, east of Morgan's winze, is still looking very promising, being 4 feet wide, and, on an average, will yield 12 or 14 cwts. of ore per fm. The caunter lode in the 12 fm. level, east of Morgan's winze, is 3 ft. wide, composed principally of friable quartz, and producing some saving work, but not sufficient to set a value on. We cannot speak of any alteration in the stopes since my last; they will, on an average, yield about half a ton of ore per fathom. We shall to-day ship the 25 tons of ore, sold to Messrs. Parker, Walker, and Co., on the 2d inst., at 10*l*. 18s. per ton.

GARREG.—The adit end driving south towards the old mine, is discharging a great quantity of water, and the lode is much improved; it will now more than pay the expenses of driving. In the adit end north there is no alteration.

GREAT POLGOOTH.—We shall require a fortnight to complete the shaft plat in the 110 at Taylor's shaft. The lode in the 96, driving east of Clark's shaft, is producing a little tin. The north lode in the 84 presents a favourable aspect, increasing in size and value as we extend upon it. On the south lode, in the 84, the ground is favourable for driving, and congenial for tin. No change in the lode at Boskilling. No alteration to notice in the tribute department.

GEORGE AND CHARLOTTE.—The lode in the shallow level, driving east, has a very favourable appearance, being full 6 ft. wide, having two leaders of rich copper ore in the south part of it, and is now producing 1 ton of ore per fathom. In the winze sinking below the shallow level the lode is from 2 to 3 ft. wide, producing nearly 1 ton of ore per fm. We expect, in sinking this winze to about 15 fms. below, to intersect the north lode, which at present has a very promising appearance. A pitch is let in the back of the shallow level at 10s. in 1*l*., and is likely to turn out well.

HEIGNSTON DOWN CONSOLS.—We purpose sinking Doidge's winze to the 55 fm. level without taking down the lode, as we find the water to increase on the lode being broken into. The lode in the 45 east is 3 ft. wide, interspersed with yellow copper ore. The 35 east is not so orey at present. At Hitchins' shaft the lode is much as last reported, and so is the 35, west of said shaft.

HENNOCK.—The engine-shaft is now down 7 fms. 3 ft. below the 20 fm. level, and I hope by the end of April we shall be down, to commence opening on the lode in that level. The ground has been somewhat harder for the last week, but still it appears again to be a little improved. We are sinking a winze under the 20, and we are now down 4 fathoms, with some good branches of lead and soft spar; the eastern side of the lode is dropping into it as we go down. This at present is all our underground operations. What we have seen of the ground under the 20 looks exceedingly well; still we have not taken down any part of the lode, but have had some good branches by the side of it. I think there cannot be a doubt of Hennock making a good mine.

HOLMBUSH.—We have contracted with the shaftmen for 50*l*., to make the shaft all complete to the bottom of the 132 fm level; the plat adjoining the same will be finished in about a fortnight's time. The lode in the 132, west of the great cross-course, is split in three small branches of spar, mixed with copper ore; the end is getting wet, and we are daily expecting to intersect the lead lode; the eastern and western stopes in the back of the level will produce 4 tons of copper ore per fm. in each place; the lode in the 132, west of the diagonal shaft, is 10 in. wide, producing 1 ton of ore per fm.; we are preparing to sink below this level upon the lode, as we intimated in our annual report. The flap-jack lode in the 120, east of cross-course, is 3½ feet wide, with two well-defined walls, composed of spar, mundic, and very good stones of ore; I never saw it so kindly in this level, and it is daily improving. The lode in the 110 east is 2½ feet wide, producing 1½ ton of ore per fm. The same lode in the 100 east will produce 2 tons of ore per fm.; the stopes in the bottom of the level are set at 3s. 6d. in 1*l*.; the lode in the 100, west of Wall's shaft, is 3 ft. wide, composed of capel, mundic, and spots of ore. We have set Wall's engine-shaft to sink below the 100 fm. level, by nine men, at 45*l*. per fm., one month's extent; the ground is not so hard by a great deal as I was led to suppose by certain persons, previous to clearing up the stuff from it, which is very satisfactory.

KIRKCUDBRIGHTSHIRE.—The lode in the 74, west of Stewart's, is 3 ft. wide, yielding 9 cwts. of lead to the fm. The lode in the 62, west of Gilpin's, is 3 ft. wide, with good stones of ore. The lode in the 50 is 2½ ft. wide, with spots of ore. The lode in the 40 west is 18 in. wide, with a stone of ore in the upper part of the end. The 30, west of Keith's, is not much improved.

LEWIS.—In the 90, south from engine-shaft, we have intersected the new lode, 8 in. wide and of a kindly appearance. The new lode in the 80, west from copper ore shaft, is 10 in. wide, opening good tin ground. The new lode in the 70, east from said shaft, is 6 in. wide, producing good stones of tin. The new lode in the 40, west from same shaft, is 15 in. wide, opening tribute ground. The new lode in the 20 fm. level, west from same shaft, is 18 in. wide, opening good tribute ground. We have set a new shaft to sink from surface, which has been just commenced, 20 fms. for 20*l*.; I hope the same will be sunk and holed to the 20 in six or seven weeks. The copper ore lode in the 20, west of copper ore shaft, is producing stones of ore; in the same level east the lode is 8 in. wide—a beautiful lode of copper ore; this was discovered some years ago in the 20, by a cross-cut driven north, and several tons of good ore raised therefrom. About the same time the lode was intersected in the 40 fm. level by a cross-cut, and the lode driven on 5 fms. west, and 1 fm. east, when it was suspended, and a dam put in to keep back the water, but it did not avail. The dam has now been removed, and the men are engaged in securing the level, which will be completed, and the two ends in operation by the middle of next week. I expect, by developing these ends, they will bear a very properous feature to the mine. In my opinion the time is not very remote when this mine will be making handsome returns of copper ore. As to the tin ground, it never looked better. We shall sample about 30 tons of tin at the usual time.

LLWYNMALEES.—The 14 fm. level west is in the best lode that has been seen in this mine. The stopes over, for 3 fms. high, are fast improving; the stopes over the above stopes, to the height of 5 fms. 3 ft. over the 14 fm. level, contain a very fine lode. The water will be out of the mine on Monday, when the 24 fm. level will be resumed; also the 14 fm. level east. The dressing goes on steadily. Thirty tons of ore were sold on the 3d inst., to Walker, Parker, and Co., realising 12*l*. 15s. per ton.

MERLLYN.—One improvement has taken place in sinking the whim-shaft of a very promising nature. The lead course, which I estimate to be worth 25*l*. per fm., is decidedly taking a western dip, and has strong indications of a further improvement: the lode for the last 2 fms. has been rather flat, but is now taking a much less underlie, a change which scarcely ever fails to increase the quantity of ore in this stratification. In the other parts of the mine little or no alteration has taken place this last week. In addition to the operations which have hitherto been carried on, a pitch has been set to six men, at 2*l*. 10s. per ton, for two months, to work on the flat (in the gravel), they having first to sink a surface shaft at their own expense, which will take them about a fortnight. This, I have no doubt, will increase our returns.

— *April* 9.—The whim-shaft still holds good, worth about 25*l*. per fathom. The winze east of whim-shaft is not yet into whole ground, but fully expect it in a day or two. The end west of whim-shaft, although not producing so much ore as last week, has a most promising appearance. No alteration in the cross-cut south from the engine-shaft since last report. There has been sampled this day a small parcel of lead, computed 20 tons, the sale of which takes place to-morrow.

MOLLAND.—The lode in the 32 fathom level, east of shaft, has been driven upon for about 50 fms. in length, the size of which varies considerably, and for several fathoms behind the present end the lode has not been taken down—it is principally composed of white iron and quartz, with good stones of ore, and will, no doubt, work at a tolerably high tribute. The 22 fm. level in many places has run together, which makes it very dangerous to go through, but from what can now be seen, the lode in the level below is not only larger, but exposes more ore to view. In cutting down the shaft, the back of the lode has been discovered, and from which some very good stones of gossan have been taken.

NANTEOS.—The lode in Taylor's is 6 ft. wide, with small branches of lead ore running through. The 40 east is unproductive. The 30 east is a little improved, yielding 12 cwts. of ore per fm. The 15 fm. level is also improving in appearance, and yielding some ore. The stopes in Bwlch Gwyn and Gwaithgoch are yielding on the average about 10 cwts. of ore per fm. Sampled on the 7th inst., 45 tons.

NEW COPPER BOTTOM CONSOLS.—Our great east and west lode is much the same as last week, producing very rich specimens of grey and black ore; lode 10 ft. wide, ore part 3 ft. We are driving north-east on the great caunter lode, which is looking extremely well, composed of beautiful prian, peach, flookan, sugary spar, with grey and yellow ore.

NORTH BULLER.—Since my last report we have intersected King's lode, by driving on the cross course in the adit level. We shall now commence driving on the lode east towards King's shaft; the lode looks very promising at this shallow level and carries its head a little south of east, which is a sure sign in this neighbourhood of its being rich in depth. The flat-rods are all prepared, and we have contracted for having them fixed. In two months we expect to commence sinking in King's shaft, which is down 26 fms. Louisa engine-shaft is down 32 fms.; the ground is remarkably easy. We shall be down to 40 fms. in about two months, at which depth we have decided upon cross-cutting north and south, to intersect the Louisa lode south, and the other lodes which have passed through this shaft.

NORTH TAMAR CONSOLS.—We are still driving on by the side of the run, or break, in the adit level, on the east side of the lode, in doing of which we have met with some good work for silver-lead. I expect, in a few days, to hole into the old level and let down the water. We shall then drive on the course of the lode, where, according to the reports of those who worked in the end last, we shall find a good branch of silver-lead ore. We shall then draw out the water from the 10 fm. level, and bring to surface some of the rich work so much spoken of from those who well know the mine.

NORTH WHEAL BULLER (OR GREAT SOUTH TOLGUS).—This mine never looked so likely to become profitable as at present. The shaft under the 60 fm. level is going down in good ground; the lode is about 18 in. wide, producing good stones of ore. In the 60 fm. level west the lode is 12 in. wide, imbedded in a good channel of ground, and producing saving work—copper ore in spar. The 60 east is but little altered, the lode is about 2 ft. wide, with spar in hard capel, and wet for driving. In the 50 west the lode is 2 ft. wide, producing copper ore, mundic, and jack throughout. In the 40 fm. level west the lode is smaller than it has been, but has the appearance of soon becoming larger and better; at present the bottom of the level is good for ore, and tells well for the level below.

NORTH WHEAL FRIENDSHIP.—At Buller's shaft, the lode in the 30 fm. level, driving west, is much as when last reported, occasionally producing stones of ore The ground continues easy for driving. Some improvement has taken place in the lode in the 12 fm. level, north of Job's shaft, producing nearly ½ ton of lead per fm. A branch of mundic, containing portions of rich copper ore, 18 in. big, has been driven through in the deep adit level in the cross-cut, north from Matthews' shaft, towards the great copper lode, since my last report, which evidently dropped off from the great lode above, which are favourable indications. There is nothing new in the pitches since my last report.

OKEL TOR.—In conformity with your request, I have carefully inspected this mine, which is situate between the Great Devon Consols, Gunnis Lake, Wheal Russel, and the celebrated Tamar Silver and Lead Mines; the former to the north, the latter to the south. The formation is the metalliferous killas or clay-slate of rather a buff colour. The navigable river Tamar runs through this valuable sett, so that a considerable saving will be made in land carriage. The operations in this mine consist of a level or adit being taken up from the River Tamar, and driven about 45 fathoms north on the course of the western lead lode into a high hill, which varies in size from 4 to 15 feet wide, composed of a large portion of flookan, calcareous spar, first-rate lead gossan, and in places disseminated throughout with lead. I saw both in the back and in the bottom of this level diggings made after the lead, and good specimens of lead are accessible now. An engine-shaft is being sunk in the slope of the hill, which meets with the adit 10 fathoms below the surface; this said shaft is now in course of sinking, and is about 18 ft. below the adit level; when this shaft is sunk to the depth of 20 fms. below the adit, I advise driving a level north, and particularly south, as this sett includes a large pan or marsh between two hills, for at least 150 fms. in length: here I have no doubt but that large quantities of lead will be brought to view. The eastern cross-course in this sett has been but little wrought on, the operations having been confined to a trial pit sunk on the lode in the south part of the sett: here it presents most promising appearances: three east and west lodes traverse through this sett; the north one has been developed a few fms. in length, and shows itself to be a well-defined lode, a good size, and composed of mundic, gossan, and sulphuret of copper. It is my decided and unbiassed opinion, if these lodes are opened a moderate depth, that favourable discoveries will be made; and I would recommend it to my greatest friends on fair terms.

OLD WHEAL BASSETT.—The shaft is sinking in favourable ground, but has not yet cut the lode. The branch cut in the 10 fathom level, above adit, is small and poor. The cross-cut is driving southwards, to cut the large lode cut by cross-cut, 14 fms. eastward. The lode in the 12, west of new shaft, is 6 in. wide—gossan, mundic, and spots of ore, but not so good as it has been. The adit west on Paul's lode is poor.

PENTIRE GLAZE AND PENTIRE UNITED.—The 23 fm. level above the adit is this day set to drive south to four men at 6*l.* per fathom; the lode has lately improved, and is now worth full 1 ton of lead ore of fair quality per fathom, and is not unlikely to continue. I hope it will make back east behind the old workings into new ground. The 10 fm. level below the adit, in the intermediate lode, also increases, and is now in the bottom full 6 ft. wide, orey throughout, yielding at this present time 4 tons per fathom; the ground, however, is hard, so we have increased our hands from four to six men, at 9*l.* per fm.; since we have discovered this ore we have driven 5 fms. on its course; the winze north below this level is now down 6 fms. 1 ft. in a most kindly lode—large, with capels, flookan, gossan, and spots of lead. We shall continue to sink until stopped by water, or down to the level of the 22 fm., now home and communicated with the boundary shaft, from which a cross-cut has been extended in this level 3½ fathoms westward towards the intermediate lode, which by our dialling yesterday in the 10 fm. level, and taking the underlie, we expect to meet with in about 2 fms. more driving: in this cross-cut, at about 6 ft. from the shaft, we have cut a promising lode, yielding good saving work, in which, in due time, we shall extend levels. At present, there are no tribute pitches working but one; 20 tutworkmen are opening productive ground for tribute, which we cannot now take away with that economy and regularity we shall by-and-bye do. We, therefore, in the meantime, have set our halvans at 7*s.* 6*d.* in 1*l.*, so as to clear the floors before we enlarge them to introduce such improvements as shall be deemed necessary in that department. There is on the mine, dressed up and ready for market, about 20 tons of halvan lead ore, besides some tons of copper ores—the value of which we do not as yet know. The work at surface from the different levels and tribute pitches will turn out about 17 tons of crop lead; and there are other halvan ores bringing about, besides no mean ores daily being broken. I should not advise selling the halvan ore by itself; I think it better to wait the admixture, to have a better sample and greater parcel. I am happy to be enabled to state that your prospects brighten apace. I find the workings generally progressing with much regularity under the management of your local agent; and, a fair regard to economy observed, I will try to continue it.

PETER TAVY AND MARY TAVY CONSOLS.—The 4 fms. taken by the sumpmen at our last setting are nearly completed. Our next setting will take the shaft down to the bottom of the winze, where a change of ground will, to all appearances, be met with, when I hope the adventurers will be rewarded for their perseverance in cutting through the hard ground that they have met with this last six months. Our lode continues as strong as ever, and the machinery in good working order.

PLYMOUTH WHEAL YEOLAND.—In driving the 32 fm. level, I am glad to say that the lode, which is at the bottom of the mine, is of late very much improved, producing 25*l.* worth of rich quality tin per fm. We purpose at once to sink this shaft deeper, as no doubt this bunch of tin will improve as we go down; although we are at present working the mine on a very limited scale, yet we expect to send to market 5 tons of tin this month. In my opinion, all that is wanted to make this a dividend-paying mine is to work it more extensively; I am glad to say that the company is about to do so. We have let an engine-house to build on Roborough Down, for a 36 in. cylinder, on the Messrs. Hocking and Loam's plan, which I expect will be in full course of working before the end of the present summer. Soon after we calculate on making good monthly samplings. I have every reason to believe that this will make, ere long, one of the most extensive tin mines in Devon. After a long pull, which the adventurers have had, there is every probability of their being remunerated for their outlay.

RHOSWYDOL AND BACHEIDDON.—With the account for March, amounting to 79*l.* 10*s.* 6*d.*, the following bi-monthly report has been received:—Prosser's level has been driven 5 fms. 1 ft. 6 in. further east, and 9 ft. crossed north through the lode. The whole of our two months' work was in orey ground, but so intensely hard that it was quite out of the question to drive in the lode at 5*l.* per fathom; the lode is still mineralised, but not sufficiently rich to pay for working. We are now driving on the north side of the lode, without taking any of the orey part. Davies' level has been driven 2 fms. 2 ft. further south, at which point we cut through the lode—the whole length of cross-cut is 60 fms. 6 in. The Augustus and main south lode have been intersected, and both contain lead ore. In the cross-cut these lodes are 14 ft. separate, and have a difference of about 10° in their courses, running into each other about 11 fathoms east of cross-cut. We have driven towards that point on the south lode 4 fms. 1 ft., leaving about 7 fms. more to the junction—that part of the lode which we have taken down contains large stones of lead and blende. We shall not strip down the whole of the lode till we are in the junction of the two, then we shall have opened ground enough for a good stope. The men working on tribute in Fox's level, have raised from 2 to 3 tons of lead in the junction of the lodes (the Augustus and south lodes), and the men in the 10 fathom level raised during the last month about 1 ton 5 cwts., consequently we have about 4 tons of lead raised, half of which is nearly clean. The 6 tons shipped per the *Friendship*, were sold on Thursday, at 10*l.* 18*s.* per ton. Our lettings for April are Prosser's level, to drive east, five men at 100*s.*; Davies' level, five men to drive east, at 70*s.* per fm.—the lead to be raised at 5*l.* per ton.—Epitome for two months ending March 29:—Prosser's level, driven further east, 5 fms. 1 ft. 6 in.; ditto crossed through lode, 1 fm. 3 ft.; Davies' level driven south, 2 fms. 2 ft.; ditto east along lode, 4 fms. 1 ft.; stoped in Fox's level, 3 fms.: total quantity of ground driven and stoped, 16 fms. 1 ft. 6 in. Lead ore raised on tribute, about 4 tons.

SILVER VALLEY AND WHEAL BROTHERS.—The lode now in the 14 fm. level has increased to 3 ft., principally composed of quartz, spar, and flookan, with white iron, interspersed with small quantities of the grey oxide of silver. The shaft will shortly be completed to the deep adit level. I would recommend our sinking a winze from the 14 fm. level to the deep adit, on the large fine gossan gone down.

SOUTH MOLTON.—We have just now prepared some stones to send you, but not having taken down much of the lode we cannot send more, as we are making preparations in order to save the work as clean as we can; however, there is every appearance of having a rich course of copper in this level, having broken some beautiful stones of native grey, black, and yellow copper. We are led to believe those stones which carry native copper ore also carry gold in them, as the men who have been working at North Molten Gold Mine say it is exactly like that which was broken at the Prince Regent Mine there. By Wednesday night I hope to be able to give you a clear statement about the breadth and character of the lode; the distance the middle lode was from the shaft is from 5 to 6 ft., I cannot tell you exactly, not having measured the ground as yet, being busy to see all we can about the value; however, before I return, I hope to show some good rocks of copper taken from these iron lodes of Exmoor.—R. Moore: *April* 8.

SOUTH TOLGUS.—The 42 fathom level east, on the south lode, is worth 3 tons of ore per fm., and the ground is much better for driving. The agent expects that 8 fms. will be driven this month. The lode in the 32 east is 3 ft. wide, now yielding 2 tons per fm. The north lode, in the 12 fm. level west, is yielding 1 ton per fm. No alteration in other bargains.

SOUTH WHEAL TRELAWNY.—The 60 is driving south by six men, ground not quite so favourable, but the lode continues its regular course; it is about 2 ft. wide, composed of flookan, fine mundic, and killas; the extreme end is not so wet as it was.

TAMAR SILVER-LEAD.—We have holed the winze in the back of the 205 fm. level, and recommenced driving the end south in this level; the lode in this end is 18 in. wide, rich work. In the winze rising in the back of the 190 the lode is 1 ft. wide, composed of capel, with spots of ore. The 175 end is in slidy ground, and unproductive. In the 160 end the lode is 2½ ft. wide, orey throughout, and producing work of a moderate quality. In the 145 end the lode is 1 ft. wide, good saving work, and of a congenial appearance for silver-lead ore. Spurgin's shaft is sunk 5 fms. 3 ft. below the 160 fathom level; the lode in this shaft is 1 foot wide, composed of flookan, intermixed with small cubes of ore. At the north mine, in the 90 fm. level, the lode is 18 in. wide, 6 in. of which is producing a small quantity of ore. In the 80 the lode is 2 ft. wide, 1 ft. of which is good saving work. In the 70 the lode is 3½ ft. wide, composed of capel and fluor-spar, with good cubes of ore. We sampled on Saturday, the 5th inst., computed 96 tons of rich silver-lead ore, samples of which have been sent to the different smelters. We are now in the position of showing the company the advantage of having two shafts. We have sampled 96 tons, which never could have been done with one shaft; and, from the appearance of the mines, I have every reason to believe we shall continue to do so in future, and to keep up our samplings to 90 or 100 tons per month.

TINCROFT.—On Highburrow tin lode, the engine-shaft sinking below the 152 fm. level is 5 feet wide, worth 16*l.* per fm. In the 152, driving east of engine-shaft, the lode is 4 ft. wide, worth 12*l.* per fm. In the 142 fm. level, east of Martin's east shaft, the lode is 4 ft. wide, worth 16*l.* per fm. The 132 end men are put to rise to communicate with the winze sinking below the 120 fm. level; we shall thereby make available some good tin ground; the lode in the end and rise is worth 30*l.* per fm. Chapple's lode in the 120, driving west of engine-shaft, is 4 feet wide, worth 18*l.* per fathom for tin and copper. In downright shaft, sinking below the 110, the lode is 4 ft. wide, worth 12*l.* per fm. In the 100 end, east of said shaft, the lode is 3 ft. wide, worth 10*l.* per fm. In the west end of the same level the lode is 4 feet wide, unproductive. We are still cutting through Grout's lode in the 80 and 70 west of downright shaft; in the latter the lode is looking well. At North Tincroft, the lode in the engine-shaft, sinking below the 110, is 2 ft. wide, producing good stones of ore. In the 110 east the lode is 2 ft. wide, worth 10*l.* per fm.; in the west end of the same level we have cut the lode west of the cross-course, which has a very promising appearance. In the 100, east of Willoughby's shaft, the lode is 2 ft. wide, but poor; in the west end of the same level the lode is 7 ft. wide, worth 22*l.* per fm. In the winze sinking below the 90, west of engine-shaft, the lode is 3 feet wide, worth 18*l.* per fathom; in the winze sinking under the same level, on the south lode, we have stones of ore.

TRELAWNY.—Trelawny shaft is sunk 8 fms. 2 ft. below the 92 fm. level, the ground moderate. In the 92 end north the lode is 3 ft. wide, and worth 8*l.* per fm.; the lode in the south end, in this level, is also 3 ft. wide, and worth 8*l.* per fm. In the 82 end north the lode is 4 ft. wide, and worth 16*l.* per fm. At the north mine, Smith's shaft is sunk 9 fms. below the 55 fm. level, and the ground is favourable. In the 55 end, north of ditto, the lode is 2 ft. wide, and worth 6*l.* per fm. In the 68 end, north of Trehane, the lode is 2½ ft. wide, and worth 10*l.* per fm. We have also taken on with the 78, north of Trehane, where the lode is 3½ ft. wide, and worth 9*l.* per fm. In the winze in the bottom of the 68 the lode is 2½ ft. wide, and worth 7*l.* per fm. The stopes are producing a fair quantity of ore.

TRELEIGH CONSOLS.—Christoe Lode: In the 100 fathom level, west of Garden's, the lode is 20 in wide, with good stones of ore, and is looking more kindly. In the 90 fm. level, west of ditto, the lode is 3 ft wide, worth 32*l.* per fm. In the winze below the 80 fm. level the lode is 20 in. wide, with good stones of ore.—Parent lode: At Parent engine-shaft, below the 52 fm. level, we are sinking in the country. In the 30 fm. level, east of ditto, we are driving to cut the lode.—Middle lode: At Burgess's shaft, below the adit, the men will commence to sink next week.

TRELOWETH.—It would appear that Penpon's lode underlies faster than was anticipated; we calculated 13 to 14 fms. only. The 32 end is at present south of the engine-shaft 14 fms. 4 ft., and we have seen nothing to call a lode; still we have cut some branches 5 fms. behind the present end, which does not look like Penpon's lode. Driven last week 7 ft., and engine-shaft sunk about 6 ft. No alteration worthy of notice.

TREVILLE.—Since I last reported we have penetrated the foot wall of the lode, and find it very soft, but a very highly mineralised stratum of killas; the lode is from 10 to 12 ft. wide, and of the most flattering character. We have began to cut our new water-course, wheel-pit, lobby, &c. Last Saturday being our usual monthly setting, we let the following underground and surface tutwork bargains:—The 20 fm. level to drive south, by eight men, at 3*l.* per fm.; the whim drawing, at 5*s.* for 12 hours; landing and filling, at 5*l.* 10*s.* per month; cart work, at 4*s.* 6*d.* and 8*s.* per day; drawing materials from the quays, 9*s.* per ton; sawing, 2*s.* 3*d.* and 2*s.* 9*d.* per 100 feet; the new leat to cut, in three bargains, at 1*s.*, 1*s.* 6*d.*, and 1*s.* 9*d.* per running fathom; lobby, 2*s.* per running fathom; and wheel pit to excavate, at 2*s.* 6*d.* per solid fathom. I hope the whole of our new works will be completed in a month. The leats will be 6 ft. wide, and 2 ft. deep, and the wheel-pit will be large enough for a wheel 35 ft. diameter, and 6 ft. breast. After these works are completed our operations will be strictly confined to the underground department.

TYWARNHAYLE.—The 100 fm. level, east of Gardiner's shaft, is improved, and is thickly spotted with ore. Bennett's shaft is still looking well. The 90 east is not so good, now producing 3 tons per fm. The 80 east, 2 tons per fm. The 100 west, 2½ to 3 tons per fm. The 80, west of railroad shaft, 2 tons of good ore per fm. The 60, east of James's shaft, 2 tons per fm., but has just met a cross head. Other parts are without alteration. Sampled 11 tons of lead ore, and 5 tons of silver ore.

WARLEGGAN CONSOLS.—The lode in the adit end is still 4 ft. wide, producing work of better quality than when last reported on. In the shaft we have a hard floor of ground; our progress in sinking this week has been slower in consequence. In the wheel-pit we are down on the back of a large lode, 10 or 12 feet wide.

WELLINGTON.—The lode in the 50 fm. level, east of the engine-shaft, is 3 ft. wide, principally spar. There is no change to notice in the cross-cut driving north in this level since the last report. Since my last writing you we have cut No. 1 lode, north in the 40 fm. level, west of the engine-shaft, and are now driving on its course east and west; it is 1 ft. wide, and has a very promising appearance, being composed of beautiful soft spar, mixed with copper ore. The ground here is fair for driving; this, we hope, will very shortly drain all the ore ground. At the western whim-shaft the water is now 3 fms. below the 10 fm. level. The ground in the cross-cut, driving north in the adit level, towards Fisher's lode, is at this time harder than it has been since we commenced driving; we are now about 6 fms. from the lode: this lode, in the shaft sinking under the shallow adit, is from 1 to 2 ft. wide, principally gossan, in which there is much native copper. In driving north in our western adit we have not yet intersected the lode. Last week we set four tribute pitches in the 10 fm. level, at and about the western whim-shaft, to 16 men, at the average tribute of 5*s.* 2*d.* in 1*l.*

WEST PAR CONSOLS.—At the Vounder, Floyd's shaft is sinking, as last reported, in good ground. We are continuing to stope the back west of Floyd's shaft by eight men, the lode continuing its size and carrying tin; also stoping east, by eight men—this back yielding good work. In the 12 fm. level we are driving west on the brown lode; the tin in this lode is very small grain—we shall prove its value when the new stamps go to work. We are also stoping the back of the lode, east of Vounder shaft, in this level, by six men; this lode carries tin, but is not rich. We shall commence cutting the plat in the 40 fm. level, in Sarah's shaft, on Friday, the 11th inst.

WEST WHEAL JEWEL.—In the 85, west of Williams' cross-course, on Wheal Jewel lode, we are driving north to communicate to the winze—drove last month, 1 fm. 1 ft. The 70, west of said cross-course, on same lode, is producing stones of ore—drove last month, 2 fms. 0 ft. 6 in. The winze in the bottom of this level is sunk 1 fm. In the 57, west of Hodges's cross-course, Tolcarne tin lode is worth 5*l.* per fm.—drove last month, 5 ft. 6 in. The stopes in the back of the level, on said lode, are worth 30*l.* per fm.—stoped last month, 4 fm. 4 ft.; rose up, 1 fm. The 57 fm. level, east of Hodges's cross-course, on said lode, is worth 4*l.* per fm.—drove last month, 2 fm. The shallow adit level, west of Tregoning's shaft, on said lode, is worth 5*l.* per fm.—drove last month, 2 fms. 1 ft. 6 in. The cross-cut south at adit level, on Williams' cross-course, drove last month, 4 fms. 5 ft. The stopes in the bottom of the 12, east of Tregoning's shaft, on said lode, are worth 18*l.* per fm. The stopes in bottom of ½ above level, west of Tregoning's winze, on same lode, are worth 24*l.* per fm. These stopes are working on tribute.

WEST WHEAL RUSSELL.—The lode in the 37 fathom level is 8 ft. big—2 ft. of which will produce full 1 ton of ore per fathom, with every appearance of an improvement as we proceed west.

WEST WHEAL TOWAN.—A lode or branch has been cut in the cross-cut driving north in the 20 fm. level, underlying north: it is from 2 to 4 in. wide, rich for tin. No other alteration is reported, no lode having been broken in any of the levels since the last report.

WHEAL ADAMS.—We have cross-cut in the 72 for about 5 fms. east, and not intersected the flookan; we have done so west for 9 ft., and cut the western silver-lead lode, which is 4 ft. wide, producing 1 ton of lead ore per fm.; there is a small quantity of sulphuret of antimony associated with it, and large streams of water issue from every part of it. As soon as we cut the flookan in the east cross-cut we purpose rising on its course to effect a communication with the winze in the 60—the air is not sufficient to rise and drive at the same time. We have placed four men to stope the lode left standing 8 fms. behind the end, about 10 ft. wide; when this is completed we shall immediately stope the backs. The lode in the winze in the 60 continues large, and it is rather improved in value, but the water is not decreased—it evidently proceeds from Wheal Exmouth, and not from our ground. The 72 north continues hard, but more strongly mineralised than we have before seen it. In the 50, north of the old engine-shaft, we have intersected the lode, which consists of barytes, spots of mundic, &c.; the ground is very good for driving, and congenial for lead. The 40 is in decomposed elvan, with branches of mundic and lead; the lode in the rise in the 40 is 2 ft. wide, and produces about 8 cwts. of lead per fm.; the stopes in the back of this level will produce about 15 cwts. of lead per fm. The stopes in the back of the 28 will produce full 1 ton per fm. of good quality ore—immediately the stopes are out of the reach of the end, we shall resume driving north. At Aller we are in slidy ground, and not yet cut the flookan. At Hill the manganese lode is 4 ft. wide, containing some good manganese. The stamping engine has been out of order, but is set to rights again.

WHEAL CREBOR.—The lode in the 54 or adit end is large, but not rich for copper, being disordered by a small cross-course intersecting it; the pitch in the back looks well; the lode is worth about 15*l.* per fm. We commenced the 40 end yesterday; the pitch in the back lode not taken down. In the 12 end, at Cock's, the lode is not yet met with; I think the heave here is great; there is a great deal of green oxide or sulphate of copper thrown out by the cross-course. In the pitch in the 24, at Smith's, the tributers will commence breaking ore the latter part of the week, or early next; and in my next I hope to give more particulars of the pitches.

WHEAL HAMLYN.—I see little or no alteration in the caunter lode since last week; we hope soon to cut the east and west one. We intend shortly to commence driving south from the adit end, in order to cut two parallel lodes, which are running at right angles, and will meet about 10 fms. below the adit level, where there is no question but we shall have a large quantity of ore. We have about 15 fms. to drive before we cut both; one of them is 5 fms. wide, and produces abundance of copperas.

WHEAL LANGFORD AND BARING UNITED.—We have completed the timber-work, cleared the attle in the adit level, and re-commenced stoping back on the north silver lode—ground more favourable for silver, but we have not taken down the lode since last reported. We have also driven about 6 ft. on the south lode east of the rise, but have no improvement; the lode still contains about 20 ozs. of silver to the ton, which will scarcely pay—consequently, we have abandoned our operations there for the present. I was in hopes that we should have resumed driving the north adit level on the course of the silver lode; but in consequence of the great fall of rain during March month, the surface water has been coming down in such abundance, that we have been prevented, but hope we shall be able to do so in the course of a few days. Mr. Matthews, the engineer, was on the mine last Wednesday, when the ground for the engine-shaft, engine and boiler-house, &c., were marked out, and we have commenced sinking the engine-shaft with all speed. We have about 25 cwts. of silver ore in course of dressing.

WHEAL MARY ANN.—The lode in the 70 fm. level, north of Pollard's shaft, is 3½ ft. wide, and worth 9*l.* per fm.; in the same level south it is 2 feet wide, and worth 8*l.* per fm. The lode in the 60 fm. level, south of the shaft, is 2 ft. wide, and worth 7*l.* per fm.; the lode in the winze sinking under this level is 2 ft. wide, and worth 9*l.* per fm. The lode in the 50 fm. level, south of the shaft, is 2 feet wide, and worth 8*l.* per fm. The lode in the 70 fm. level, south of Barratt's shaft, is 4 feet wide, and worth 25*l.* per fm. We have now commenced sinking Pollard's shaft under the 70 fathom level by 12 men. The stopes throughout the mine are usually productive.

WHEAL RUSSELL.—In driving east from the cross-cut in the 48 fathom level, the lode is 3 ft. wide, producing saving work; in the end driving east on the north lode, in this level, the lode is 1½ ft. big, producing 1½ ton of ore per fathom; in driving north on the cross-course, to the west of the engine-shaft, in the same level, a rich leader of copper ore continues with the cross-course; at present it is worth 10 cwts. of copper ore per fathom, and certainly looks promising for the lode to the west of the cross-course; there appears to be from 2 to 3 fathoms to drive to reach the point where we expect to meet the lode. No lode has been met with in the cross-cut north in the 37 fm. level on the cross-course, to the east of the engine-shaft, since I last reported; in sinking on the great lode, in the south part of the sett, the lode at present appears to be dividing itself into several branches, producing good stones of ore. The pitches continue to look well—the one in particular, referred to in my former report, yielding full 6 tons of ore per fathom. In consequence of the tides not permitting vessels coming up the river, we have not, though ready, sampled at the time intended; but hope to sample upwards of 45 tons of ore.

WHEAL TOM AND DEER PARK.—We have driven west in the adit, on the great tin lode, 7 fms. the last four weeks—price, 2*l.* 10*s.* per fm.; the lode is 5 ft. 6 in. wide, and of the most promising character, with well-defined walls, underlaying 2 ft. 6 in. per fm. The lode is tinny, mixed with spar, quartz, iron, yellow gossan, with yellow and white prian between the gossan and the hanging wall of the lode—driven west on the deep adit on the south underlay copper lode 7 fms. 1 ft., price 2*l.* per fm.; the lode is 4 ft. 6 in. wide, composed of brown gossan, black and yellow mundic, felspar, quartz, and spots of black copper ore, with a blue flookan on the footwall of the lode, which underlays south 3 ft. in 6 ft., and has two well-defined walls; the ground by the sides of the lode is blue and white killas, being congenial for copper ore. In sinking a shaft to intersect the newly-discovered copper caunter lode, on the south part of the sett, it will intersect the lode about 10 fms. from the surface, which will give us an idea where to commence the engine-shaft. I am of an opinion we shall have abundance of copper ore at the junction of the east and west copper lodes and the caunter copper lode. We have sunk a pit on the course of the caunter lode 2 fms. deep; lode 7 ft. wide, and contains gossan in abundance, with arsenic, and every other indication of being a productive lode. I do verily believe that Wheal Tom will make a first-rate dividend-paying mine ere long. Our surface work the last week has been rather confined, owing to the heavy rains; but the little we have done in costeaning south of the great tin lode in the trial pits about 40 fms. south, and to hill of the great tin lode, has been very satisfactory. We have found several stones of tin, of the best quality, 10 feet deep from surface, close to the primitive rock, which leads me to suspect we are near another tin lode. Should the weather prove favourable next week, the material-house will be completed; we shall then commence building the wheel-pit and heave in the wheel, which would have been long since finished, had we not had so much rain.

— *April* 10.—Our usual survey took place on Saturday (5th inst.) John Fisher and his three partners have taken the beep adit to drive west on the copper lode, extent 6 fms., at 3*l.* per fm.; the lode in the adit end is 4 feet wide, composed of quartz, felspar, prian, mundic greatly increasing, with spots of black and yellow copper ore, lode greatly improving as the back gains on it, which is as fast as it takes the hill. Charles Gun and his five partners have taken the adit to drive on the great tin lode, extent 6 fms., at 3*l.* per fm. There has been no lode taken down since setting day; when taken down it was 7 ft. wide, composed of blue capels, spar, and mundic in abundance, with stones of tin, and spots of black ore: there is a large stream of water issuing from the lode. From the great influx of water, I am of opinion we are nearing the great caunter lode sooner than was first anticipated. Thomas Floyd and his three partners have about 5 or 6 fms. more to sink to intersect the lode in the shaft; and should the ground prove favourable, I hope to cut it by the end of this month; the shaft is now sinking at 3*l.* per fm., extent 4 fms. We have six men costeaning, and, as before stated, have opened on several splendid lodes, and shall be prepared by the end of this month to decide on the place for erecting our steam-engine. Our powder and material house is up and covered in, and the walls of the yard will be up and completed by Saturday.

WHEAL TREMAYNE.—At boundary engine-shaft, sinking under the 63 fm. level, the branches continue to look well—they are now worth 50*l.* per fm. In the 63 fm. level, east of boundary, on the engine lode, the lode is 15 in. wide, worth 7*l.* per fm.; in the 63 fathom level, driving east of boundary, on the south branches, the branches are worth 9*l.* per fm.; in the 63 fm. level, west of flookan, on the same branches, the branches are worth 14*l.* per fm. In the winze sinking under the 53 fm. level, west of Allen's shaft, the branches are worth 15*l.* per fm. In Allen's shaft, sinking under the 53 fm. level, the branch is worth 8*l.* per fathom. The men belonging to the 54, east of Allen's shaft, on Allen's branch, are still engaged stoping the 53 fm. level on the engine lode, to let down water at Madron's shaft on the south lode. In the 70 cross-cut east the ground is good for driving, and is progressing favourably—we expect to intersect the flookan shortly; ditto west, the lode is 3 ft. wide, worth 6*l.* per fathom. In the 90, east of Williams' engine-shaft, on a north lode, the lode is 7 in. wide, composed of spar, mixed with prian, with some tin, but not of any value; the shaft sinking below the surface, on the same lode, is suspended for the present in consequence of surface water. At middle shaft, on the north lode, in the 10 fm. level west, the men have been engaged driving by the side of the lode to communicate with the 10 fm. level east of Champion's shaft—we expect this to be accomplished next week. In the cross-cut driving north of middle shaft, in the same level, to intersect a north lode—the ground is rather harder than we expected to find it. Since our last report we have set the flat-rods to work at Painter's shaft on the south lode, and have got all in fork. The shaftmen have been engaged this last week fixing a drawing lift in the 50 fm. level, and will commence sinking under the same next week. In the 50 fm. level west the lode is 18 in. wide, worth 4*l.* per fm., having a very kindly appearance; ditto east the lode is 14 in. wide, producing good stones of ore. In the 40 fm. level west the lode is split in several parts, chiefly composed of spar and flookan, with some good ore, opening tribute ground—the level is communicated with west whim-shaft. We have driven a cross-cut north about 4 fms. east of Painter's shaft, and intersected a caunter lode, which is small and poor, and is suspended. In the winze sinking under the 9 fm. level, east of Richards' shaft, on the wheel lode, the lode is 4 in. wide, opening tribute ground. We have costeaned the back of the south lode, and cut the same west of the great flookan, which is 8 in. wide, chiefly composed of spar, without any gossan. Our tribute department is looking much the same as it has for some time past.

WHEAL TREWANE.—As I find I shall be unable to attend your meeting on Thursday, the 10th inst., I beg to forward my report of the progress of operations on the mine, which I visited last Saturday. I found the engine-shaft sunk 9 fms. from the surface, which is nearly equal to the 20 fm. level of the older working; the shaft is continuing by its full complement of men—six miners and three labourers; and a fair price at present will be from 12*l.* to 13*l.* per fm. The shaft is sinking on the lode, or rather one of its principal branches, which is composed of highly crystallised matter, argentiferous lead, quartz, and lime, in a very kindly blue killas. We contemplate that in the 12 or 15 fathom levels some of the branches which have been discovered to the north in costeaning will form a junction with this branch, and perhaps contribute to form a course of lead ore. The stem receiving the junction of all these branches will probably be about 20 or 30 fms. deep in a very different state from that in the old workings, and below the deepest level of them. The wheel keeps the shaft dry with much ease—four strokes per minute, in a 6-inch lift: I contemplate that the wheel will enable us to drain to the junction of all the branches, and put us in a position to command a steam-engine by the value of the ore discovered.

WHEAL UNY.—We have contracted with Mr. Hodge, of the St. Austell Foundry, to make and erect a 50-in. cylinder steam-engine, with all the latest improvements, with a 12-ton boiler complete; it is to be 10 ft. in the shaft and 11 ft. in the cylinder, and to be delivered on the mine within three months. We have also contracted with Mr. Kinsman, of Redruth, to build an engine-house, which he has commenced, and it will be completed in two months. The outbuildings and account-house we take possession of in the course of the week; and it will require but a small outlay to put them in working order. Now the weather has become more settled, we are exceedingly anxious to get the mine in fork, so as to cut the copper lode to the north of the engine-shaft in the 48 fathom level from the surface, which is in the granite, and looks very promising on the back.

WHEAL VENTON.—We have cut a lode from 2 to 3 ft. wide, composed of capel, quartz, prian, and gossan; it is nearly downright, and running north and south, and in the true bearing line of the Trelawny lode, and a little north of this mine, Butterdon, &c.; and from the character of the lode being similar to that running through Venton and Butterdon, there is no doubt of its being a continuation of the same. Taking into consideration the very favourable soft killas stratum in which the lode runs, with the very promising appearance of it, it deserves a spirited trial.

WHEAL VINCENT.—The lode in our west end, in the 10 fathom level, is 15 in. wide, very good for tin, and easy ground; also the ground in the new engine-shaft is easier, which is about 5 fms. 2 ft. below the 10 fm. level. On the whole, this mine presents a better appearance at present than it hitherto has, and I have no doubt that it will prove a profitable one to the proprietors.

MINING IN ST. AGNES.—Mining here is looking much more favourable than for a considerable time past. At Perran St. George there is to be immediately erected at Devonshire shaft, an 80-in. cylinder engine, which will enable these rich mines to be developed much more completely than has yet been done; the operations hitherto having been principally above the adit level. At Wheal Prudence they are still cross-cutting the country in strata similar to those of Perran St. George, the lode being very near. Wheal St. Agnes has been set to work: all the shares were readily caught up; applications for 70 more than the allotted number being refused.—Several setts have been secured, and will immediately be put into operation, causing the district again to move in the mining world, and considering it has been so little developed, it seems strange that capitalists have not directed their attention here earlier.

WHEAL UNY (Redruth).—Mr. Hodge, of the Foundry, St. Austell, has the contract for supplying a new 50-in. cylinder steam-engine and boiler complete, for immediate erection upon this mine.

THE COUNTY OF CORNWALL.—In a lecture on the Physical Geography of Cornwall, Mr. R. Q. Couch described the beauty and salubrity of its valleys, and drew attention to the rivers which cut the county, as it were, into small, peninsulas, and which, assisted by the ocean, produced a temperature so equable, as scarcely to be equalled in the world. In speaking of the internal heat of the earth, he gave the thermometrical temperatures of the Cornish mines at different depths, clearly proving that the deepest mines were the warmest. Mr Couch then spoke of the intelligence of the Cornish miners, as compared with other working men, of their wear and tear in descending to their work, their perspiration when at it, and their again ascending, causing in some cases, a loss of weight in the eight hours thus occupied by them, of from 6 to 8 lbs. each man, the loss varying according to the depths at which they worked.—In the discussion which followed, one of the members stated a circumstance as evidencing the warmth of the winter in Cornwall, that he had that evening after sunset seen a butterfly on the wing.

TRELEIGH CONSOLS MINING COMPANY.

The usual half-yearly meeting was held at the offices, Old Broad-street, on Monday, the 7th inst., G. B. Carn, Esq., in the chair.

After the usual preliminaries, the SECRETARY read the following report, from Capt. W. Richards, the managing agent:—

Redruth, April 5.—Although I may be expected to send you my report, I can add but little to the captain's weekly reports. On Christoe lode, west of Garden's shaft, you are aware that most of our levels are extended a considerable distance, and some of them, particularly the 80, have been good. The 90 has also been good for nearly 30 fms. driving, and is now a good level: we have two pitches working in back of said level, at 4s. tribute. The 100 fm. level is improving, and within 2 or 3 fms. of the ore ground in the 90: should this prove good, and we have no reason to doubt it, it will open some good tribute ground. You are aware that we are not driving any eastern levels, for reasons which you are acquainted with, and, therefore, our operations are limited; I may add, working to a disadvantage—drawing water without any benefit.—Wheal Parent: This part of the mine has disappointed me much: from the appearance of the 30 fm. level, I anticipated doing well at the 40 and 50; and although the ore held down nearly to the 40, the level itself was comparatively poor, and the 52 equally so. We are sinking the engine-shaft, not only for this lode, but to prove the middle lode at greater depth, which in the 40 fm. level has been promising, with some short branches of ore, and a favourable appearance. Our returns of ore have been small of late, but I hope soon to increase them. We shall sample next week from 90 to 100 tons—30 tons good ore, from the 90 end and back. We could have sampled 10 or 12 tons of stamped ore, but as this must be sampled alone, I thought it had better be left another month, when I expect to get 20 tons or upwards.

The following statement of accounts was presented to the meeting:—

Receipts and Payments for Six Months, ending March 31.

To balance at annual meeting	£844 17 1	By monthly cost, &c. &c.	£2512 8 2
Copper ore sold	3102 7 10	Merchants' bills paid	689 6 4
		Lord's dues paid	107 16 0
		Dividends paid	17 0 0
		Balance, cash in hand	620 14 5
Total	£3947 4 11	Total	£3947 4 11
ASSETS.		LIABILITIES.	
Cash and bills	£620 14 5	Acceptances	£735 10 3
Ore sold, 27th March	327 8 0	Outstanding claims	375 13 3
Reserved fund	618 0 0	Lord's dues owing	153 7 0
Total	£1566 2 5	Total	£1264 10 6

The weekly report, which will be found amongst our Mining Correspondence, having been read, a short conversation ensued, and the business terminated by a vote of thanks to the chairman and directors.

NOTES ON MINING—GOOD AND BAD.

[FROM A CORRESPONDENT.]

LAMBROOB WHEAL MARIA.—The tin lode—that is, the champion 'ode—is worth more like 15*l.* than 10*l.* per fm. The B lode will be cut again in the 80 fm. level in about one month, when it is expected, from the fact of the fluor-spar being associated with the droppers into the copper, that the lode will be important at that level.

GRAMBLER AND ST. AUBYN much improved, and shares sought for.

WHEAL VINCENT looks very fair on the lode, but the tin is slowly returned. The ground above the 10 fm. level very limited for stoping purposes. The shaft is down 6 fms. below the 10 fm. level, but it is doubtful if the work will be speedy enough to get at the 20 fm. level before the dry weather commences. A steam-engine is at once required, which appearances fully warrant the erection of.

WHEAL SARAH (St. Kew) looks pretty well—10 fms. deeper in the shaft will prove matters there.

BODMIN CONSOLS.—They have cut a course of ore worth 30*l.* per fm. in the 13 fathom level, and the winze sinking from the adit above has the same course; and if, in a week or 10 days the cross-cut in the 26 fm. level cuts the same course, there will be between 20,000*l.* and 30,000*l.* worth of ore in sight.

WHEAL TRESCOLL is going on, but Capt. Webb has left, and the company is in a state of confusion, I believe. The working of the decomposed granite requires a different system from what has been adopted from the beginning. Shares have been sold at 30s.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

CALLY (copper and lead).—The Cally estate, situate near Gatehouse of Fleet, on Wigton Bay, Kirkcudbrightshire, extends over an area of nearly 20,000 acres, and contains partially explored mineral lodes, which give the most promising indications of being productive of great riches if worked with spirited and judicious economy. This company is now formed for the purpose. The mineral property is held on lease for 31 years, at one-fourteenth dues, and no fixed rent. A large quantity of ore has been raised in former years from a very small extent of ground. An adit level has been driven for 250 fms., which has unwatered a large extent of ore ground; and, from the report of Mr. J. Burgess, mining engineer, a large mass of ore ground may be immediately opened up. From the quality of the ore, and the promising nature of the mineral strata, this gentleman gives it as his opinion that, with skilful and judiciously conducted operations, a good return must be made for the outlay.

EAST WHEAL MARGARET (tin and copper).—This sett, in the parish of Uny Lelant, extends over between 400 and 500 acres of mineral ground, situate about one mile from Wheals Reeth, Mary, and Margaret, held under a 21 years' lease, at 1-18th dues. Four excellent master tin lodes have been discovered—three underlaying north, and one south, besides others of less consequence—the sett extending on their run 400 fms. One of these lodes was worked on some 40 years since, with very inefficient machinery, and sufficient tin raised to pay expenses. This, and another 40 fms. south, underlie differently, and it is considered that at their junction favourable results may be anticipated. The Golden Cock copper lode runs through the sett, and is looked upon by experienced agents to hold out the most promising indications of large returns of copper ore. It is 2½ miles from Hayle, whence supplies can be obtained at an easy rate of carriage. The mine is divided into 1024 shares, which are all taken up. A 38-inch cylinder engine, with other machinery, has been erected, and it will require about 2000*l.* in addition to sink, drive, and otherwise open the ground, and develope the capabilities of the mine.

OKEL TOR (silver-lead and copper).—A prospectus has just been issued by the present holders of this sett, from which it appears that the mine is situated in a bend of the Tamar River, in the parish of Calstock, Cornwall, close adjoining Tamar, South Tamar, and East Tamar Silver-lead Mines—the ore already discovered at a shallow depth giving 37 ozs. of silver to the ton. It is expected that the principal cross-course, which runs through Devon Great Consols, will make lead in the Okel Tor sett to as profitable an extent as it has copper in the Wheal Maria; and latterly a new lode has been discovered, 4 feet wide, with most promising indications, only 10 ft. east of the engine-shaft. Reports from Mr. Evan Hopkins and Capt. S. Seccombe have been received, highly favourable and satisfactory, who consider the indications of that importance as to warrant a spirited outlay of capital for the development of this mineral ground. There are 1024 shares in the hands of the original adventurers, which are to be held free up to 6*l.* per share, to be paid on another 1024 shares now issued, with an additional 10s. as deposit; but it is fully expected 4*l.* per share will be sufficient to bring the mine to a profitable state: 300 shares have already been taken up by respectable parties in Exeter alone.

VICTORIA (copper).—This sett, in the parish of St. Neot, Cornwall, is about three miles from Liskeard, and has eight of the Caradon lodes running a little south of east and north of west, with a northern underlie passing through it, in a granite stratum parallel to the outcrop of killas or clay-slate formation, which extends along the southern boundary, and in the neighbourhood of two cross-courses, and a caunter lode, which intersects the east and west lodes at intervals of about 100 fathoms from each other. The agents at Devon Great Consols, West Caradon, Holmbush, Wheal Trelawny, Trehane, and Wheal Venton, all men of celebrity, have reported very favourably of this mine, as may be seen on reference to the prospectus. Victoria Mine possesses an abundant and never-failing supply of water-power, with a fall of 150 feet, equal to several hundred horse-power, in the driest season, which is a great advantage to the prosecution of the workings. A former party expended 3000*l.* in preliminary works, which are now available for the purposes of the company. The sett is about half a mile square. The lease is for an unexpired term of 21 years, at 1-15th dues. It is divided into 4000 shares, one moiety of which is offered to the public at 50s. per share; the proceeds, after providing for the purchase of the sett, buildings, and work done, to be applied to working the mine.

WEST TAMAR (silver-lead).—This sett, extending about half-a-mile from north to south on the course of the lodes, and a mile from east to west, is situate in the parish of Landulph, Cornwall, bounded by the South Tamar Mines, the lodes in which are now being driven on towards this sett, and 45 tons of silver-lead ore raised per month. An adit has been driven on the course of the lode for 20 fms., in which it is 4 ft. wide, with well-defined walls, producing beautiful specimens of ore in a soft blue killas. The present proprietors offer for sale 524 out of 1024 shares, at 30s, 20s. of which are to be retained by the present proprietors, and the remaining 10s. per share to be applied to the working of the mine. Reports from Capts. J. Eddy, J. Hambly, and B. Robins, have been received, which are favourable, and Capt. Robins, who has 50 years' experience in the adjoining mine of South Tamar, recommends the sinking a shaft, and has no doubt of a course of ore at about 10 or 12 fms.

WHEAL WILLIAMS (copper).—This sett, situate at Latchley, in the parish of Calstock, Cornwall, immediately adjoins the Devon Great Consols westward, the two shafts being only 250 fms. apart, and contains several lodes, two of which are those of Wheal Maria. Two engine-shafts have been sunk—one on the north lode 20 fms. deep, which lode is from 5 to 6 ft. wide, and contains mundic, capel, peach, prian, and copper ore. About 150 tons of ore have been sold. The south engine-shaft, distant 70 fms. on gossan lode, is down 30 fms., lode averaging 3 ft., very kindly. There is upon the mine a 45-in. cylinder steam-engine, some pitwork, smith's and carpenter's-shop, account-house, &c. This work was accomplished five years ago by a company, who engaged to pay the unusual and enormous dues of one clear twelfth, as well as 30 per cent. out of the profits! Such being the case, and gaining experience at an early date of their folly, they became tenacious of calls, which some not responding to, the result was inevitably a stoppage and abandonment. The present lessees have secured the sett, and some additional ground, at the reduced rate of 1-15th dish, and offer one moiety (2000) of the shares to the public, at 2*l.* 10s. per share, which, after paying for the sett, plant, and preliminary expenses, will leave 2000*l.* working capital.

CRAIG DDU SLATE QUARRY.—The company working these quarries, which are now in a position to make immediate profits, appear to hold out fair prospects to the shareholders: and from the report of Mr. Evan Hopkins, it seems the returns will, under fair management, progressively increase. There are 2800 shares out of 6000 already allotted, and the remainder will, no doubt, shortly be appropriated, as *bonâ fide* undertakings are now duly appreciated.

PROGRESS OF MINING—DIVIDENDS, &c.

We this week resume our examination into the position and prospects of the several mines which appeared in our dividend list for the last quarter.

THE LISBURNE MINES (Cardiganshire) came into the possession of the present adventurers on the 1st of May, 1834. The concern is divided into 100 shares, on which calls were made to the amount of 75*l.* per share, or 7500*l.* in all. The payment of dividends commenced in 1835, in which year 1000*l.* was paid. The largest sum divided in one year was in 1850, the amount being 11,500*l.* The total profits divided up to the present time amount to 62,000*l.*, or 620*l.* per share, and there is every prospect that the present rate of dividends will be maintained. At 720*l.* per share, the market price, it is about 6¼ years' purchase.

BEDFORD UNITED (copper, Devon), an improving mine for some time past. Operations commenced about nine years ago; the concern soon became profitable; 8000*l.* has been divided in the last three years, and 1600*l.*, or 8s. on 4000 shares, for the past four months. The present price of shares, 8*l.*, is about 6¾ years' value.

WELLINGTON MINES (copper and tin, Perranuthnoe) commenced working about six years ago, and on an outlay of 6400*l.* became profitable. During the last two years they have divided 1*l.* 7s. 6d. per 1024th share (1920*l.*), and in the past four months 15s. per share (768*l.*), which, at 15*l.*, the market price, is about 6¾ years' value.

NORTH ROSKEAR (copper, Illogan) realised a profit of 90,000*l.* half a century ago, resumed working in 1819, and has been a very prosperous mine, the shares principally held by the lord of the soil and his friends in Cornwall and elsewhere. During the last three years the dividends made have been 40*l.* per 140th, and for the last four months 10*l.* per 140th. The mine is in good working condition, has a considerable balance in hand, and from her increased samplings the dividends are likely to be sustained. At the present rate of shares, 160*l.*, the purchase would be about 5½ years' value of the bi-monthly dividends.

SPEARNE CONSOLS (tin mine, St. Just) dividends have been 22s. 6d. per 1024th (1152*l.*) for the last four months, and for the three years preceding 1*l.* 12s. 6d. per share (1658*l.*); the present price of shares, about 12*l.*, is less than 3¾ years' value of the bi-monthly dividends.

SOUTH BASSET (copper, Illogan) resumed working in the early part of 1832, and expended about 2600*l.* which brought them to a profitable state. Up to the present time the dividends have been 225*l.* per 256th (including 256*0l.* paid in April). The prospects are exceedingly flattering, the dividends being likely to be kept up for a considerable time to come. The present price, 390*l.*, would be about 6½ years' purchase. The actual profit upon January and February workings were 314*9l.* 17s. 2d., or 12*l.* 6s. 1d. per share. Having a vast extent of almost unexplored ground between the present workings and those further south, of which many experienced miners entertain equally as good an opinion as of the northern, which has proved so productive, the subject was fully brought before the bi-monthly meeting on the 1st inst. (which was very fully attended), when it was unanimously resolved to erect an engine of suitable power forthwith upon the said southern ground, and give it a full and fair trial, without loss of time; the cost of doing which will be defrayed out of the extra profits, and the usual dividends made for some time to come. The prospects are exceedingly flattering.

MARY ANN (lead, Menheniot) upon an outlay of 2500*l.* became profitable in 1849, since which the shareholders have received in dividends 7805*l.*, being 15*l.* 5s. per share (including 3*l.* for the quarter in February). At the present rate of dividends, the shares, at 60*l.* each, are about 5 years' value.

SOUTH TOLGUS, situate on the western border of Redruth parish, its north-western boundary corner, is the south-eastern one of North Pool, in the adjoining parish of Illogan. South Tolgus sett consists of the southern ground of Old Wheal Tolgus, that yielded such large profits 30 years ago. The workings are upon two lodes, not wrought at that period. Many of the adventurers entertaining a good opinion of this ground, and finding it not likely to be affected by the water of Old Tolgus, determined, about five years ago, to give it a trial. They expended about 4096*l.*, being 16*l.* per 256th share. Showing very favourable prospects, they were induced to erect a steam pumping-engine; also a whim-engine, crusher, and all other requisite machinery, which brought them to a profitable state of working. In Jan., 1850, they were enabled to declare the first dividend of 2*l.* per 256th share—since which, including two made in this year, they have paid to their fortunate shareholders 4992*l.*, being 19*l.* 10s. per 256th share, and will declare another very shortly. The mine is quite in its infancy, compared with its rich and surrounding neighbours, being only 54 fathoms deep. As they appear to be taking away but one-half the quantity of ore they discover monthly, it may be fairly calculated that the present bi-monthly dividends must increase; at all events, they have ore enough discovered to go on as they are for a long time to come. At the present rate of dividends and price of shares, 155*l.*, it is 10½ years' purchase.

NORTH BASSET (Illogan, upon the South side of Carn Brea Hill).—This sett remained for half a century neglected, notwithstanding the prosperity of its immediate neighbours—on the south, Basset, and north the Carn Brea mines—the other side of the hill. Even the numerous resident mining *cognoscenti* of Redruth passed by the spot unheeding, and left the task of exploring below to one of Cornwall's most enterprising sons—Mr. Joseph Lyle, of Bonython, under whose able and spirited management it is in a highly prosperous state of working, to the depth of 82 fms. below adit. The lode is large, from 3½ to 5 ft. wide, composed of black, grey, and other rich-quality copper ore, which is disposed of by private contract. In February the accounts for 1850 were audited, showing, copper ore sold, 3102 tons 8 cwts., yielding 18,528*l.* 8s. 2d., at a cost of only 12,367*l.* 11s.—leaving a profit of 6170*l.* 17s. 2d (one-third of the produce). Two dividends had been made in the half-year, amounting to 457*0l.* A further dividend was then declared of 5s. per share (1500*l.*), and leaving 90*l.* 16s. 9d. to next account,—a sufficient proof of the value of the mine.

BOTALLACK MINE (tin and copper, St. Just) may truly be called one of the wonders of the far west. The site is upon the cliff, and overlooking the Atlantic; at times the Scilly Islands are distinctly visible. This mine was wrought out under the sea beyond the memory of any person now living, and has yielded, from time to time upwards of 320,000*l.* profit, sometimes from tin, and at others from copper of very high produce. This induced the miners to take away ore in some of the higher levels, that had been as well left there, having by this means more than once "tapped the sea," as may be seen by the wooden wedges driven in the borer holes to caulk them up watertight. In some of these levels the heaving of the waves may be distinctly heard above head, creating an awful sound "to ears polite," and visitors seldom wish to go deeper into this "chamber of horrors," as they picture and proclaim it.* The situation at surface is romantically picturesque, the engines being near the base of the cliff, only 1 fm. distance from the roaring sea. In 1841 they were rich in copper; now the tin predominates, which they dispose of by private contract—the copper sale for the last quarter being only 68 tons, at 7*l.* 5s. 6d. per ton (515*l.* 2s.) In 1848 they were under the necessity of making a call of 7*l.* 10s. per share. Last year they divided a profit of 1000*l.*, and for the last quarter 500*l.*, from actual profits. At the present price of shares, 210*l.*, it is about 10½ years' purchase.

* An interesting description, by one recently there, will be given in next week's Journal.

GOGINAN (Cardiganshire)—Operations at these mines commenced in July 1836, the adventure being divided into 100 shares, upon which the only call made was one of 5*l.* per share, or 500*l.* The mine speedily yielded returns, which paid for all necessary works, and in 1840, 4000*l.* in dividends were paid. The profits have been very fluctuating, amounting to 9000*l.* in 1846, and diminishing to 2000*l.* in 1850. The whole amount divided is 44,000*l.*, or 440*l.* per share. The mine still holds out good promise, but a return of large profits mainly depends upon the result of some trials now in course of prosecution.

ROCKS AND TREVERBYN.—In last week's Journal there was an error in the report of the quarter's return of tin from these mines. The correct account stands thus:—

1851—January	*Tons*	13	6	2	22	produced	£729 3 4
February		11	10	2	21	,,	641 17 11
March		15	0	2	26	,,	832 6 8
Total	*Tons*	39	18	0	13		£2203 7 11

These mines, we may add, are situate near St. Austell, held on lease for 21 years, at a royalty of 1-20th, is divided in 5000 shares, and worked on the Cost-book System. The sett was taken by the present proprietors about 18 months since, and the outlay up to this time has somewhat exceeded 23,000*l.* As regards machinery, &c., there is not a mine, we believe, in a more complete and satisfactory condition. The sales of tin from September to the present time have been gradually increased from 7½ to 15 tons in March, the last price being 65*l.* 10s. per ton. On the 3d February last the manager commenced sinking Gray's shaft from the 30 to the 50 fm. level, where a cross-cut will lead into the heart of the main lode. The last report states them to be within 6 fms. of the lower depth—viz.: at 44 fathoms from surface. The system adopted in working these mines is generally approved, and little doubt is entertained that, from the judicious energy applied, the Rocks and Treverbyn Mines will soon appear amongst the dividend-paying mines of Cornwall.

LATEST CURRENT PRICES OF METALS.

LONDON, APRIL 11, 1851.

ENGLISH IRON. *a*	*per ton.*	Tile	£83 0 0
Bar, bolt, & square, London	£5 7 6–5 10	Old copper *e*	*per lb.* 8½*d*
Nail rods	6 2 6–6 5	Yellow Metal Sheathing	7¼*d*–8*d*
Hoops	7 0 0–7 5	Wetherstedt's Pat. Metal †	*Cwt.* 1 12 0
Sheets (singles)	7 12 6–7 17 6	**FOREIGN COPPER.** *f*	
Bars, at Cardiff & Newport	4 15 0–4 17 6	South American, in bond	77 0–87 0
Refined metal, Wales*	3 10–3 15	**ENGLISH LEAD.** *g*	
Do. anthracite*	3 10 0	Pig	*per ton* 17 10 0
Pigs in Wales	3 0 0	Sheet	18 10 0
Do. do. forge	2 5 0–2 10	Pipe	19 0 0
Do., No. 1, Clyde	*net cash* 2 1 6–2 2	Red lead	19 0 0
Blewitt's Patent Refined Iron for bars, rails, &c., free on board at Newport*	3 10 0	White ditto	24 0 0
Do., do., for tin-plates, boiler plates, &c., ditto	4 10 0	Patent shot	20 10 0
Stirling's Patent Toughened Pigs in Wales	2 15 0 / 3 10–3 15	**FOREIGN LEAD.** *h*	
Staffordshire bars, at the works	5 5 0	Spanish, in bond	17 5–17 10
Rails	5 7 6	**ENGLISH TIN.** *i*	
Chairs (Clyde)	4 0 0	Block	*per cwt.* 4 4 0
FOREIGN IRON. *b*		Bar	4 5 0
Swedish	11 15–12 0	Refined	4 10 0
CCND	17 10 0	**FOREIGN TIN** *k*	
PSI	—	Banca, H. C.	4 2–4 3
Gourieff	—	Straits	4 1–4 2
Archangel	—	**TIN-PLATES.** *l*	
FOREIGN STEEL. *c*		IC Coke	*per box* 1 7 0
Swedish keg	15 10 0	IC Charcoal	1 12 6
Ditto faggot	15 0 0	IX ditto	1 18 6
ENGLISH COPPER. *d*		**SPELTER.** *m*	
Sheets, sheathing, & bolts, *p. lb.*	0 0 9½	Plates, warehoused	*per ton* 15 0–15 2 6
Tough cake	*per ton* 84 0 0	Ditto, to arrive	15 0 0
		ZINC. *n*	
		English sheet	*per ton* 21 0 0
		Quicksilver *o*	*per lb.* 3*s.* 9*d.*

WELSH BAR-IRON is not quite so firm as last week; 6000 tons of rails have been purchased on American account, at rates which have not transpired. The 17,000 which was reported to have been sold by a north country house, about three weeks since, for a Prussian railway, turns out to have been taken by the Rhenish ironmasters, at rates considerably less than those tendered by the English firms.

STAFFORDSHIRE IRON is very dull of sale.

SCOTCH PIG-IRON is firm.

SWEDISH IRON.—Not any sales have been reported this week.

SWEDISH STEEL.—But little doing.

COPPER displays the same steadiness, and smelters are full of orders.

YELLOW METAL SHEATHING in good demand.

BRITISH TIN is not much in request.

FOREIGN TIN is very flat—buyers of Banca at 81s., sellers, 82s.; Straits, buyers at 80s., sellers at 81s.

SPELTER.—The last mail from Hamburg brought much lower quotations, consequently about 200 tons were thrown upon this market, which found eager buyers at 15*l.* Only 90 tons have been exported to Calcutta during the present year.

LEAD is in good demand, without alteration.—TIN PLATES in fair request.

BIRMINGHAM, APRIL 10.—The third of the quarterly meetings of ironmasters for the Shropshire district was very numerously attended—representatives of all the large houses being present, with many gentlemen from London and Liverpool. Soon after the business had begun, rumours were abroad of some underhand sales being made; but they were unauthenticated. There were several large orders in the Hall, could they have been taken at a decreased figure; but the principal firms would not agree, and they are, consequently, held over for the present. On the whole, the trade was flat, and real business very limited. The last meeting of the trade will be held at Dudley this day, when some thing more definite will be known.

EXPORTS OF METALS TO ALL INDIA FROM LONDON AND LIVERPOOL,

FOR THE FIRST THREE MONTHS OF 1850 AND 1851.

Metals.		1850.	1851.	In. in 1851.	Dec. in 1851.
Spelter	*Tons*	314	110	—	204
Copper		1540	1221	—	319
Iron, British, bars		8993	9729	736	—
,, rails		—	1500	1500	—
Ditto, Foreign		145	107	—	33
Tin-plates	*Boxes*	3809	7356	3547	—
Lead	*Tons*	722	1214	492	—
Steel		161	85	—	76
Quicksilver	*Bottles*	13	—	—	12

CORNISH STEAM-ENGINES.

The number of pumping-engines reported for the month of Feb. is 27—the quantity of coals consumed being 2674 tons, lifting, in the aggregate, 23,000,000 tons of water 10 fathoms high—the average duty of the whole is, therefore, 50,000,000lbs. lifted 1 foot high by the consumption of a bushel of coal.—The following have exceeded the average:—

Mines.	Engines.	Length of stroke	Load in pounds.	Load per sq. inch on pist.	Strokes per min'	Consump. of coal in lbs.	Millions lifted 1 foot by consump. of 1 bush. coal	Lifted 1 foot by 1*c.* of coal.
Great Work	Leed's 60-in.	9·0	55,343	15·2	9·3	2568	56·8	68
Wh. Tremayne	36-inch.	9·0	26,123	19·9	13·3	1767	52·7	63
East W. Crofty	Trevenson's 80	10·33	82,333	12·2	8·3	3690	54·0	64
Carn Brea	Sims's 50 & 90	9·0	51,125	20·2	7·1	1592	63·7	76
Poldice	Sims's 85-inch	10·33	78,207	9·6	11·5	4688	54·1	64
S. W. Frances	75-inch	11·0	61,836	11·4	7·5	2520	64·1	76
United Mines	Cardozo's 90-in.	9·0	100,682	13·8	9·1	5556	53·0	63
Ditto	Eldon's 30-inch	9·0	13,631	16·0	8·2	529	64·7	77
Ditto	Loam's 85-inch	10·0	87,947	11·6	10·4	5110	54·3	65
Ditto	Hocking's 85-in.	10·0	97,817	14·1	10·0	5240	55·9	66
Tywarnhayle	Gardiner's 80-in	10·0	78,365	12·4	8·1	3672	56·5	67
East Wh. Rose	Penrose's 70-in.	10·0	79,181	18·5	5·1	2662	54·3	65
Ditto	Michell's 85-in.	10·0	81,494	12·9	5·0	2370	60·6	72

[Abstract from Browne's *Cornish Engine Reporter*, from Feb. 20 to March 20.

PUMPING-ENGINES.	
Number reported	28
Average load per square inch on the piston, in lbs.	13·3
Average number of strokes per minute	6·3
Gallons of water drawn per minute	6521
Average duty of 19 engines—being million lbs. lifted 1 foot high, by the consumption of 1 cwt. of coals	64·5
Actual horse-power employed per minute	1365·9
Average consumption of coals per horse-power per hour, in lbs.	3·8
ROTARY-ENGINES—WHIMS.	
Number reported	21
Number of kibbles drawn	72,191
Average depth of drawing, in fathoms	126·0
Average number of horse-whim kibbles drawn the average depth, by consuming 1 cwt. of coals	50·2
Average duty of 13 engines, as above	19·5
STAMPS.	
Number reported	7
Average number of strokes per minute	10·6
Average duty of 6 engines, as above	47·0
Actual horse-power employed per minute	236·1
PUMPING-ENGINES DOING HIGHEST DUTY.	
Par Consols—80-inch single	*Millions* 100·2
Fowey Consols—80-inch single	98·9
Great Polgooth—80-inch single	87·0
West Fowey Consols—60-inch single	84·2
Par Consols—72 and 36-inch Sims's combined	78·8
Callington—50-inch single	69·9
Great Polgooth—67-inch single	66·0
Devon Great Consols—40-inch single	63·8
WHIM-ENGINES.	
Par Consols—24 & 13-inch Sims's combined	*Millions* 30·5
Fowey Consols—22-inch double	27·3
Great Polgooth—22-inch double	23·0
Fowey Consols—22-inch double	22·8
Par Consols—24-inch single	22·7
Wheal Trelawny—24 & 14-inch Sims's combined	21·9
STAMPING-ENGINES.	
Great Polgooth—35-inch double	*Millions* 60·5
Tincroft—36-inch double	54·1
Lewis—52 and 28-inch Sims's combined	48·9

LITERARY NOTICE.

A System of Apparatus for the use of Lecturers and Experimenters in Mechanical Philosophy. By the Rev. ROBERT WILLIS, M.A., F.R.S., &c., Jacksonian Professor of Natural and Experimental Philosophy in the University of Cambridge. London: John Weale, High Holborn.

To those who are in the habit of explaining the principles of mechanism by models at the lecture table, a great annoyance arises from the multiplicity of the arrangements, and the consequent bulk and expense of a collection of separate models, opposing great obstacles to successfully explaining the subjects under notice. The present volume has been collated by the talented author, to show how a system of mechanical apparatus may be constructed, so adapted to each other that they admit of being put together at pleasure in the form of any machine that might be required. This idea, it appears, originated with the Rev. William Farish, the late Jacksonian professor, in 1813, and which he carried out in delivering a course of lectures on arts and manufactures, repeated from that period to his death in 1837. Upon the succession to the chair of the author, he found that so total a change had taken place in the forms and construction of manufacturing mechanism that his predecessor's apparatus was useless. He, however, saw that this plan of Protean machinery was capable of being carried out in a very complete manner, of great practicability, and much more extensive application to philosophical apparatus in general than he had previously conceived. The volume under notice is the result of the author's mechanical designs, which, as described, appear composed of comparatively few parts, capable of being built up and arranged to show the operation of the most simple or most complex mechanical arrangement. The parts consist of brackets, clamps, stud sockets, washers, nuts, screw bolts, a slit table, sole block, loops, bolts, flange, levers, shafts, guide pulley, link-work, parallel motion, and various other pieces of machinery, all drawn to scale, and however diversified the pieces, slots, pins, bolts, screws, bearings, &c., all accurately fit each other, and may thus be arranged for any wheel and pinion motion, or any other mechanical arrangement which may be required. The volume is got up in Mr. Weale's usual elegant and substantial style, and the plates in outline isometrical perspective, are all drawn to scale, and give a clear exposition of the directions.

Current Prices of Stocks, Shares, & Metals.

MINES.—The important event of the week is the establishment, on a basis likely to prove permanent, of a Mining Exchange, independent of the Stock Exchange, and to which the members of the latter body can only have access by the ministration of the former. Transactions in mining shares began in this new locality on the 7th inst., and daily a large amount of business has been done, comprehending, however, only the superior class of mines, whether dividend or prospective. A conservative power, should the objects contemplated by the new establishment be fully carried out in practice, will now be exercised over all really valuable mining property, to the discomfiture of mere schemes, by whomsoever introduced to public notice. Some brilliant discoveries of mineral wealth have taken place in the eastern mining districts, of which full particulars will be gained by an attentive perusal of our columns. A remarkable instance of mining success may be stated in the West Buller shares, for which, with 10*l.* only paid, 1200*l.* per share has been offered and refused.

In the Metal Market, English Tin is very quiet, and Foreign greatly depressed.—A good business doing in Copper.—Lead is active, and a parcel of hard Spanish has been sold to arrive.—Spelter is very dull, and prices merely nominal.—Yellow Metal Sheathing is in request, and a fair demand for American Flange Rails.

The amount of dividends paid in the first quarter of this year, ending March, as well as the calls made for the same period, are respectively—

	Dividends.	Calls.
January	£24,981 0 0	£21,507 16 7
February	13,827 0 0	13,453 12 0
March	32,954 10 0	27,905 4 0
Total	£71,762 10 0	£62,866 12 7

The ticketings for 100 tons of Laxey lead ore fluctuated from 18*l.* 7s. 6d. by Thomas Somers, of Bristol, to 20*l.* 10s. 6d. per ton, by J. H. Meredith, of the Fowey Consols Mines.

The Keswick Mines sold 15 tons of lead ore at 11*l.* per ton, and 4 tons at 10*l.* 5s. per ton.

Herodsfoot sold 80 tons, at 12*l.* 18s. per ton.

A parcel of tin from the Great Beam Mine realised 421*l.* 1s. 7d.

The Llwynmalees Mine has sold 30 tons of lead ore to Messrs. Walker, Parker, and Co., at 12*l.* 15s. per ton.

Nanteos Mine sampled, on the 7th inst. 45 tons of lead ore.

Tamar Mine sampled, on 5th inst., computed 96 tons silver-lead ore.

A considerable improvement is apparent in the report from Holmbush Mine; the levels are evidently looking better than for some time past.

Of the new mines recently brought before the public, and commanding good premiums, are the Kenmare and West of Ireland, and the Helston Consols, Cornwall.

At Carn Brea Mines, in the 10 fathom level, east from Miner's shaft, at Burncoose, a course of copper has been cut worth 30*l.* per fm.

At Wheal Agar, they are reported to have a course of ore worth about 60*l.* per fathom.

At Nansegollan Mine, the engine-house is nearly finished, when they will proceed to put in the engine, which is expected to be at work early in the ensuing month.

An engine, of 50-in. cylinder, has been contracted for by the Wheal Uny adventurers, Redruth, and will be erected forthwith, to give that sett a perfect trial below all former workings. The tin lode was very large and productive; and the prospects for copper are deemed very favourable. They have a vast extent of high ground north and south unexplored, through which several lodes are known to pass; and the workings altogether have hitherto been but to a shallow depth.

At Yeoland Consols, they are clearing out the foundation for the engine, with prospects of a good mine; the leader improves in size and quality.

Wheal Sydney (late Fernhill Wood, Plympton), on Monday last, commenced working by means of a water-wheel. The appearances below are represented highly favourable, and such as the shareholders present were much pleased with.

At Bedford United a considerable improvement is visible in the tribute department. A pitch in the back of the 80, which set last month at 10s., is now reduced to only 3s. The pitches in the 103 are also doing well, three of them working as low as 2s. 11d. in 1*l.*

The erection of the engine and buildings at East Wheal Reeth is proceeding rapidly, and it is expected that all will be completed by the 12th of May, according to contract.

We find we understated the amount of dividends made at North Pool (an error at all times on the right side); this arose from our not being in possession of the dividend account for 1848—viz.: 115*l.* per 100th share, 11,500*l.*; which being added to our statement of 275*l.* per share, 27,500*l.*: makes 39,000*l.*, the real amount divided. Operations were partially commenced in June, 1843, under the name of Wheal Raven. The deed for 21 years is dated 11th Jan., 1845, when the concern was working more vigorously, and above is the result thereof.

Lewis Mines continue to progress most favourably: the proceeds of black tin from 1st May, 1850, to end Jan., 1851, amounted to 14,104*l.* 18s. 11d., being an average price of 51*l.* per ton; 23 tons 13½ cwts. of arsenic sold at 3*l.* 10s., 82*l.* 15s. = 14,187*l.* 13s. 11d.—Costs from 1st May to end of January, 11,620*l.* 13s. 3d.; directors for nine months, 150*l.*; management and office expenses, 150*l.*; balance of interest account, 80*l.* 4s. 3d.: leaves a profit of 2186*l.* 16s. 5d., from which were paid dividends 500*l.* on the 4th Dec., and 500*l.* on the 12th of Feb., which with 828*l.* 9s. 10d. balance last account, leaves a cash balance in hand of 358*l.* 6s. 7d. They have recently discovered a copper lode in the 20 fm. level, from which there are great expectations. The tin ground never looked better; they expect to sample 30 tons.

At the Union Tin Smelting Company's meeting, on Wednesday, the usual dividend, at the rate of 10 per cent. per annum, was declared—one-half of which had been declared and paid in the preceding half-year. The concern shares prosperity with the other smelters, and gives satisfaction to those whose capital is embarked in it.

At the United Mines meeting, on the 4th inst, it was resolved that the proposal made by Mr. Michael Williams, respecting the purchase of shares at the price of 80*l.* each, should be left to the decision of each individual adventurer. Mr. Richard Taylor reported that the mines were drained to the 208 fm. level, and workings continued to this date, without any improvement in the prospect of the mines. A large portion of the adventurers have already intimated their determination not to carry on their shares beyond this month; it was, therefore, resolved "that the agents be instructed to take all necessary measures for winding up the affairs at the end of the month, unless the above-mentioned proposal of Mr. Michael Williams should be carried into effect." A copy of the proceedings of this meeting has been forwarded to each adventurer.

At Wheal Prudence meeting, on the 1st inst., the accounts showed—Balance of last account, 57*l.* 12s. 8d.; Oct. cost, 23*l.* 5s. 8d.; ditto Nov., 20*l.* 10s. 10d.; Dec., 31*l.* 15s. 5d.; Jan., 19*l.* 10s. 7d.; Feb., 29*l.* 9s. 3d. =182*l.* 4s. 5d.—By call, Oct. 14, 128*l.*: leaves balance due to the purser, 54*l.* 4s. 5d. A call of 12s. 6d. per share was made. It was resolved to take a new deed from the Duchy of Cornwall, in the names of Edward Way, Esq. (Isle of Wight), Mr. M. T. Hitchins, and Capt. Thomas Pill, for 21 years from the 29th Jan., 1850, the dues to be 1-20th, and an annual payment of 5*l.*, should the amount be less, in any one year, upon the minerals raised.

At the East Wheal George meeting, on Tuesday, the accounts for Feb. and March showed—Expenditure, 364*l.* 10s.—Copper ore sold, 463*l.* 5s. 8d.: leaving profit on the two months, 98*l.* 15s. 8d.; add balance from last account, 29*l.* 10s. 2d.: leaves to credit of company, 128*l.* 5s. 10d., besides about 50 tons of ore of good quality on surface, of which they have sampled 24 tons 12¼ cwts. for March. The salary of Capt. John Lean was increased 1*l.* per month, in consideration of the efficient manner in which he has discharged the duties of managing agent at the mine.

At Treleigh Consols meeting on Monday, the financial statement showed a balance in hand of 620*l.* 14s. 5d., and also a balance of assets, after discharging all liabilities, of 301*l.* 11s. 11d. The 90 west is now worth 32*l.* per fm., and the level below will be under the bunch in about 6 fathoms driving; should the lode hold good there, the samplings will soon revive again, the quality of the ore being exceedingly good.

At a special general meeting of adventurers in Praed Consols, on Monday, a call of 10s. per share was made, and it was the opinion of the meeting that an engine should be shortly erected. The reports from the mine continue satisfactory.

At Wheal Arthur meeting, on Thursday, the minutes of the previous one were confirmed, and the report of the committee submitted, which was received with much satisfaction. In consequence of a recommendation at the previous meeting, a deputation, accompanied by Capt. Lean of Holmbush, and Capt. Trewren, of South Caradon, inspected the mine, and reported most satisfactorily. Since then the prospects have continued to improve, and the works were progressing favourably. The agent's report of 29th March stated that a lode had been cut 10 ft. wide, producing large rocks of gossan, and was the most promising at surface he had ever seen. A cross-cut was recommended in the 50 fathom level to the southern boundary. A call of 5s. per share was made.

At North Buller general meeting, on Thursday, the report stated that the call in January last, and the money previously in hand, amounted to 1309*l.* 15s. 4d., and there had been expended 1281*l.* 1s. 2d., leaving a balance in hand of 28*l.* 14s. 2d. The chairman congratulated the adventurers on the favourable appearance of the undertaking; he had just returned from Cornwall, and everything was progressing satisfactorily. The engine-shaft was down 32 fms., and at 40 fms. they intend cross-cutting for the several promising lodes near the shaft, which we expect will take about three months. They had proceeded with the greatest vigour, and, at the same time, with due regard to economy. The committee recommended a call of 1*l.* per share, with which the underground operations would be pushed on with the utmost speed.

At Wheal Langford and Baring United Mines meeting, on Thursday, the accounts showed—Balance in hand 31st Dec., 744*l.* 4s. 9d.; silver ore sold, 62*l.* 16s. 3d.=807*l.* 1s.—By Jan. and Feb. expenditure, 148*l.* 3s. 8d.: leaves balance to next account, 658*l.* 17s. 4d. The order for the engine was confirmed.

At the Rhoswydol and Bacheiddon meeting, on Saturday last, the accounts showed—Balance last account, 308*l.* 13s. 5d.; labour cost Feb. and March, 89*l.* 18s. 7d.; merchants' bills, 50*l.* 1s.; purser's disbursements, 18*l.* 3s. 5d.=466*l.* 16s. 5d.—By calls, 147*l.* 12s. 8d.; ore sold, 99*l.* 9s. 9d.: leaving balance against the mine, 219*l.* 14s.; in addition to which there are lord's dues owing about 170*l.*, to meet which liabilities the assets are, ores sold, April 2, 67*l.* 4s.; calls due, 27*l.* 11s.

We inadvertently stated last week, that a call had been made in East Crowndale; we are happy to find, however, that the affairs of the company are in so satisfactory a state that the shareholders, instead of paying, will have to receive—the directors being about to declare a dividend. The agent, in his report of the 5th inst., says:—"The lode in the 50, east of elvan course, is about 3 feet wide, good saving work, ground hard for driving. In the 40 east the lode is 4 ft. wide, with a leader of tin 10 in. wide. The stopes in the back of the 40 are turning out rich.

Shares have changed hands this week in Alfred Consols, West Alfred, Tremayne, Mary Ann, Treviskey, Trefusis, Merllyn, South Tamar, Garreg, East Gunnis Lake, Herodsfoot, Lewis, Bodmin Consols, Butterdon, Trelawny, Molland, Comfort, Condurrow, Grambler, Tolcarne, Providence.

In Foreign shares, transactions have taken place in St. John del Rey, Santiago, Copiapo, United Mexican; and Anglo-Mexican Mint at 20¼.

At Linares, the San Thomas engine-shaft was progressing satisfactorily. The 55, east of San Anton winze, was in a very good lode, worth 5 tons per fm.; west of ditto the lode is worth 2 tons per fm. The lode in the 45 is worth 2 tons per fathom. Shaw's shaft was down 13 fms. 1 ft. 9 in. under the 45 fm. level, the lode unproductive and ground hard. The 45 was nearly cleared to the end, and a resumption of operations in that level was expected to be begun shortly. The ore in stock was 803 tons 3 cwts.

The Kinzigthal meeting was convened for Tuesday, but there were not sufficient shareholders present to constitute one. The expenditure at the mines had been reduced to about 80*l.* per month, and no charge was made for London management or offices. The chairman and Mr. Capper explained that all the shares upon which the calls due in Jan. and Sept., 1850, were not paid had been forfeited, the number being reduced from 5000 to about 3200, on which 2*l.* 10s. each had been received, and a call was now necessary, the directors being nearly 600*l.* in advance. The meeting was adjourned to 20th May, in the expectation that by that time a special report will have been received from a party who had gone out to the mines.

Private letters received from Mexico intimate that Mr. Shoolbred, the late respected manager of the United Mexican Mining Association, died suddenly at Mexico, early in February, where he had gone for the restoration of his health.

At the meeting of the Company of Copper Miners, on Saturday last, the governor, deputy-governor, and court of assistants, were re-elected, with the exception of Mr. Curtis, in whose stead Mr. Granger was nominated. A strong discussion took place, but owing to the complicated state of the company's affairs, no business was transacted beyond the election.

Meetings have been held during the week for the maturing the regulations of a Mining Exchange, at the Jamaica Coffee-house, when Messrs. Thomas Field, J. Y. Watson, T. P. Thomas, H. B. Rye, and W. Trenery, were nominated a provisional committee, Mr. James Stride being honorary secretary. We are informed that upwards of 20 agents have subscribed to the rules and regulations, which will be found in our advertising columns.

HULL, APRIL 10.—Messrs. T. W. Flint and Co. state that the market for mining shares has been firm and well supported throughout the week. Transactions have been chiefly confined to Alfreds, Tremaynes, and Wellingtons—stocks which hold a midway position between heavy-priced shares, which are not much dealt in here, and the newer adventures. In the above there are buyers and sellers at a slight difference in prices; and in Lewis, Bryntail, Gustavus, and a few others, there are buyers and sellers at a reasonable margin. Bedfords are rather better. Trefusis and West Tolgus are almost entirely neglected. South Trelawny, buyers at low prices. In other stocks not much doing; but a better feeling generally.

THE ROTATION OF THE EARTH.—At a *soirée* at the Russell Institution, on Wednesday evening, Professor Ansted, of King's College, gave a lecture on the supply of water to large towns, illustrated by numerous maps and diagrams, which was listened to with great attention; after which Foucault's recent experiment, affording a palpable demonstration of the rotation of the earth, was exhibited, and was conducted in a manner similar to the experiment at the Panthéon at Paris. The wire, which suspended a weight of 28 lbs., was of the size of the middle C string of a piano. It was 30 feet long, and vibrated over a graduated table fixed to the floor. The rotation of the table, implying that of the earth on which it rested, was visible in about five minutes, and the wonderful spectacle was presented of the rotation of the room round the pendulum. The experiment excited the astonishment of every beholder, and many eminent scientific gentlemen who were present expressed their great delight in witnessing a phenomenon which they considered the most satisfactory they had witnessed in the whole course of their lives. We believe this is the first time that the experiment has been verified in this country.

PURE OXIDE OF ZINC PAINT.—The zinc ores of New Jersey, in the United States, are said to be the most free from other metallic alloys of any yet discovered, those from Europe being either carbonates or sulphurets, and often mechanically combined with iron, galena, arsenic, and antimony, and the consequence is that the oxide is never obtained pure. The mines of the New Jersey Exploring and Mining Company are situate between Sparta and Hamburgh, and contain immense quantities of zinc ore and franklinite. The latter is of great value, but at present operations are confined to the manufacture of white and brown paints from the zinc at the works, furnaces, and mills at Newark, where 2000 tons each of these paints are manufactured annually. The company can manufacture it at a less cost than white lead can be sold for and it is getting into very general use from the absence of those poisonous properties so injurious to the workmen and others in lead paints.

TREMAR COPPER MINE.—The following report has been received from Capt. William Rule, dated April 8.—"Since our last general meeting we have sunk down the shaft 6 fms., and holed it upon the adit end, and are now driving east on Raby's lode, by six men, with all speed; the lode is 2½ ft. wide, with a very promising appearance, and fine stones of copper ore. The ground is still favourable for driving, and everything is proceeding with satisfaction."

PATENT FUEL SHIPMENTS.—There are three splendid Dutch vessels, two East Indiamen, and a barque, now loading Warlich's patent fuel, at Swansea, for steam navigation abroad. We are glad to hear that this superior manufacture is becoming appreciated, from the care and dispatch with which ships are loaded, coupled with the important qualification—the exemption of the fuel from spontaneous combustion, to which coal is frequently subject. A few days ago, the Patent Fuel Company dispatched two fine large ships, nearly 1000 tons burthen, to the East Indies.—*Cambrian*, this morning.

MINING APPOINTMENTS DURING THE MONTH.

12. Pay at East Crofty, Cook's Kitchen, West Treasury, Alfred Consols, United Mines,
14. Wheal Seton account, on the mine. [Phœnix.
15. East Pool and Tywarnhayle accounts, on the mines.
16. North Roskear and other mines sampling.
17. Ticketing at Redruth—Devon Consols and other mines.
18. Pay at Levant, Nansegollan, and Wheal Buller.
19. Pay at Tremayne, Levant, West Seton, Pendarves, Agar, Treviskey, Consols, Com
21. Condurrow account, on the mine. [fort, Fowey Consols
23. Carn Brea and other mines sampling.
24. Ticketing at Redruth—Perran St. George, United, and other mines.
25. Pay at North Pool, Treleigh, Heigneton Down, Great Wheal Alfred.
26. Pay at South Frances, North Roskear, Condurrow, Wheal Seton, Tywarnhayle, Trethellan, Grambler, Copper Bottom, West Alfred, and Callington.
29. North Pool account on the mine.

NOTICES TO CORRESPONDENTS—*Continued.*

Our respected Cornish friend, the *West Briton*, has not acted with his usual good faith, in adopting our statistical information of last week without acknowledgment.

"Y. Z." (Wakefield).—The offices of the principal gas companies in the neighbourhood of London are—The Chartered, New Bridge-street, Blackfriars; the London Gas-light and Coke Company, Southampton-street, Strand; the Phœnix, Bankside; the Imperial, John-street, Bedford-row; the Independent, Haggerston; the South Metropolitan, Canal-bridge, Old Kent-road; the Commercial, Ben Johnson's-fields, Stepney; the Central Gas Consumers' Company, Bow; the Western Gas-light Company, Hollesstreet. There are also the Brentford Gas Company, and the Poplar Gas Company, communications to which will reach them by post by the addition of "near London;" the Alliance, Finsbury-circus; the Brighton and Hove, St. Swithin's-lane; the Brighton, Austinfriars; the British, George-yard, Lombard-street; the Bude Light Company, Bedford-street, Strand; the Deptford, Creek-street, Deptford; the Deptford, Rotherhithe, and Bermondsey, Coleman-street, City; the Equitable, John-street, Adelphi; the European, Finsbury-circus; the Imperial Continental, White Hart-court, Lombard-street; the Ratcliff, High-street, Wapping; the Surrey Consumers' Company, Upper Stamford-street, and the United General Gas Company, Austinfriars.

Richard Harvey (Islington).—The famous Russian diamond was stolen by a French grenadier from an idol at Malabar, named Scheringham. He sold it for 20,000 rupees: it was purchased by a Jew, who sold it to the Russian Government for 17,000*l.* Its weight is 179 carats. The one which is placed beneath the golden eagle in the Russian sceptre, was sold by a Greek merchant, named Gregory Saffras, to Prince Orloff, for Catherine II. He received for it 90,000*l.*, an annuity of 4000*l.*, and a patent of nobility.

Gold was first coined in England in 1257, about the forty-first year of the reign of Henry III., who struck a gold penny, value twentypence, weighing two sterlings, made current in the reign of Edward III., in 1344, when that prince first coined florins, which were soon succeeded by nobles, and other coins. Of the gold penny of Henry III. only three specimens are extant: two of them are in the British Museum.

LEAD ORES.

TICKETINGS FOR ABOUT 100 TONS LAXEY LEAD ORE.

Douglas, Isle of Man, 9th April.

Bidders.	*Price per Ton.*
J. H. Meredith (trustee of the late J. T. Treffry)—Fowey Consols (purchaser)	£20 10 6
Walker, Parker, and Co.—Dee Bank	19 16 6
Mather and Co.—Bagillt	20 2 0
Newton, Keates, and Co.—Bagillt	19 16 0
J. P. Eyton—Llanerchymor	20 1 0
Sims, Williams, Nevill, and Co.—Llanelly	19 19 6
Thomas Somers—Bristol	18 7 6
Tamar Smelting Company—Beeralston	18 14 6
Pontifex and Wood—London	19 15 0
Locke, Blackett, and Co.—Newcastle	20 0 0

Ticketings at the White Horse Hotel, Holywell, on the 10th April.

Mines.	*Tons.*	*Price per Ton.*	*Purchasers.*
Maesyrerwddu (Talargoch Mine)	93	£11 18 0	Walker, Parker, & Co.
Coetia Llys (ditto)	13½	12 17 6	Newton, Keates, & Co.
Hendre	8	11 0 0	ditto.
Ditto	8	11 0 0	Walker, Parker, & Co.
Ditto	4½	11 6 0	ditto.
Ditto	4½	11 6 0	J. P. Eyton.
Deep Level	80	11 4 6	Walker, Parker, & Co.
Talnere	30½	12 18 6	Newton, Keates, & Co.
Ditto	3½	12 8 6	J. P. Eyton.
Lloc	60	13 0 0	Walker, Parker, & Co.
Merllyn	10	11 14 0	Mather & Co.
Bwlchgwyn	50	11 13 6	Newton, Keates, & Co.
Black Craig	52	10 4 0	ditto.
Sold in London.			
Keswick	15	£11 0 0	Locke, Blackett, & Co.
ditto	4	10 5 0	ditto
Sold at Liskeard.			
Herodsfoot	80	£12 18 0	Walker, Parker, & Co.
Sold at the Mine.			
Llwynmalees	30	£12 15 0	Walker, Parker, & Co.
Bwlch Consols	15	£15 1 6	Newton, Keates, & Co.
ditto	15	15 1 6	Eyton & Co.
ditto	15	15 1 6	Walker, Parker, & Co.
East Tamar	58	14 11 0	Locke & Co.
Penhale	15	9 10 6	Michell & Son.
Wheal Adams	50	9 16 0	Sims & Co.

BLACK TIN

Sold at the Mine, on the 4th of April.

Mines	*Cwts.*	*qrs.*	*lbs.*	*Price per Ton.*	*Amount.*	*Purchasers.*
Great Beam	44	2	26	£63 0 0	£140 18 0	Daubuz & Co.
ditto	29	3	6	57 0 0	84 18 9	ditto
ditto	41	1	4	52 2 6	107 11 11	ditto
ditto	7	3	19	49 5 0	19 10 0	ditto
ditto	28	3	11	47 5 0	68 2 10	ditto

Total—152 cwts. 2 qrs. 10 lbs.—Amount of money, £421 1s. 7d.

COPPER ORES.

Sampled March 26, and Sold at Andrew's Hotel, Redruth, April 10.

Mines.	*Tons.*	*Price.*	*Mines.*	*Tons.*	*Price.*
Carn Brea	85	£5 1 0	Alfred Consols	50	£7 3 6
ditto	79	6 18 6	ditto	31	12 18 0
ditto	78	6 16 6	ditto	24	4 5 6
ditto	73	4 3 6	ditto	20	8 18 0
ditto	66	4 3 6	Par Consols	114	6 7 6
ditto	63	6 18 6	ditto	89	5 9 6
ditto	60	4 9 6	ditto	70	6 15 0
ditto	58	1 15 0	Levant	104	1 14 0
ditto	34	3 14 0	ditto	44	7 10 0
ditto	30	5 12 6	Polberrow	72	2 19 0
Tywarnhayle	120	2 18 6	ditto	69	3 15 0
ditto	84	3 0 6	West Wh. Treasury	52	7 10 0
ditto	78	3 2 6	ditto	50	4 4 6
ditto	70	3 16 6	West Wheal Seton	53	4 8 6
ditto	68	7 8 6	ditto	46	4 16 6
ditto	29	3 7 6	Wellington Mines	51	3 14 6
ditto	25	3 1 0	ditto	39	5 18 0
ditto	21	2 18 6	Wh. Unity Consols	44	2 0 0
ditto	17	3 8 6	ditto	28	2 1 0
Nancekuke	48	3 8 6	Wheal Agar	41	4 6 6
ditto	24	2 0 0	ditto	25	7 6 0
ditto	10	1 17 6	Hawk's Point	37	4 14 0
Wheal Buller	126	4 8 6	ditto	7	1 6 0
ditto	73	6 6 6	West Providence	31	11 1 6
ditto	61	8 6 0	South Wh. Speed	26	3 0 0
ditto	60	9 6 0	Wheal Friendship	13	3 15 0
ditto	52	6 16 0	Friendly Mines	5	16 3 6
Alfred Consols	79	4 19 0	East Crinnis	2	5 17 0
ditto	75	4 19 0			

TOTAL PRODUCE.

Carn Brea	625	£3189 16 6	Wellington Mines	90	£429 1 6
Tywarnhayle & Nancekuke	591	2146 8 6	Wh. Unity Consols	72	145 8 0
			Wheal Agar	66	359 16 6
Wheal Buller	372	2419 3 6	Hawk's Point	44	183 0 0
Alfred Consols	279	1801 11 0	W. Wh. Providence	31	343 6 6
Par Consols	273	1686 10 6	South Wh. Speed	26	78 0 0
Levant	148	596 16 0	Wh. Friendship	13	48 15 0
Polberrow	141	471 3 0	Friendly Mines	5	80 17 6
West Wh. Treasury	102	601 5 0	East Crinnis	2	11 14 0
West Wh. Seton	99	456 9 6			

Average Standard .....£102 1 0 | Average Produce 7¾

Average Price per ton £5 0 6

Quantity of Ore .....2983 tons | Quantity of Fine Copper, 226 tons 18 cwts.

Amount of Money £14,950 2 6

LAST SALE.—Average Standard.....£104 14 0.—Average Produce..... 6¾

Standard of corresponding sale last month, 98*l.* 8s.—Produce, 8¾.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal	186	£1022 3 9
Vivian and Sons	663	2857 11 0
Freeman and Co.	343	1591 10 3
Greenfell and Sons	437	2126 4 0
Sims, Willyams, and Co.	376	1900 5 6
Williams, Foster, and Co.	876	4582 6 0
Schneider and Co.	102	870 2 0
Total tons	2983	£14,950 2 6

Copper ores for sale on Thursday next, at Andrews Hotel, Redruth.—Mines and Parcels.—Devon Great Consols, Wheal Josiah, Wheal Maria, Wheal Fanny, and Wheal Anna Maria, 1517—Marke Valley 315—West Caradon 295—Fowey Consols 261—Holmbush 225—Wheal Friendship 205—Bedford United 140—Phœnix Mines 138—Wheal Busy 47—Wheal Gorland 20.—Total, 3163 tons (21-cwts.)

Copper ores for sale on Thursday week, at Andrew's Hotel, Redruth.—Mines and Parcels.—United Mines 877—Tresavean 337—South Caradon 273—Wheal Comfort 272—Par Consols 264—South Tolgus 236—Treleigh Consols 85—Wheal Mary (Redruth) 74—West Wheal Jewel 70—West Trethellan 29—Richards' ore 19—Respryn 9.—Total, 2545 tons.

At SWANSEA, for Sale April 22.—Cuba, 458; Knockmahon, 365; Santiago, 356; Spanish, 118; Burra Burra, 113; Chili, 20.—Total, 1430 tons (21-cwts.)

CURRENT PRICE OF GOLD AND SILVER.

Portugal gold, in coin	*per oz.* £3 17 5	Mexican dollars	*per oz.* £0 4 11½
Foreign, in bars	3 17 9	Spanish doubloons	3 16 6
		Silver, in bars	5s. 1½d.

THAMES TUNNEL COMPANY.

The number of passengers who passed through the Tunnel in the week ending April 5, was—28,164.—Amount of money, £117 7s. 0d.

NOTICES TO CORRESPONDENTS.

LEAD ORES—SMELTING AND DRESSING.—"A Trunking Boy's" communication is inadmissable; it is of too personal a character, and, moreover, contains no new practical information. The writer appears to labour under the ridiculous prejudice that inventions and improvements emanating from working men do not meet with encouragement and reward, while the whole history of British invention shows the contrary. It is true there are many obstacles in the way of all inventors, rich or poor, in their endeavours to bring a new arrangement into use, and the profit is generally left to successors; but, leaving the patent laws out of the question, any *real* improvement will, from the very nature of things, be sure to make its way. Our correspondent, for his communication in the *Mining Journal* of March 29, and many others, is deserving of thanks, rather than be subject to the coarse insinuations of "A Trunking Boy."

"J. H."—All the reports received have been inserted.

"F. S. M." (Bedford).—Lead ore has been found in the Arkansas, United States; it is said to yield 80 per cent. of lead, and 112 ounces of silver to the ton. A parcel fetched in New York, a short time since, from $90 to $100 per ton of 20 cwts.

"A. B." (South Wales).—We are not aware of the publication of any work on the geology of Yorkshire alone, but only as a portion of the kingdom, embracing the new red sandstone, the magnesian limestone, the oolite, lias, and coal formations. Apply to Mr. Weale, the bookseller, High Holborn. We do not know if Mr. Atkinson's paper on Tubbing has been published in the *Transactions* of the Civil Engineers; but this could be ascertained on application to the secretary, at the institution, Great George-street, Westminster.

STEAM-BOILERS.—Mr. Joseph Price, of the Durham Glass-works, Gateshead, in a letter to the *Gateshead Observer*, suggests "that the different descriptions of steam-boilers now in use ought to be inspected by a committee of scientific men, and the safest and best-constructed should be brought into general use by Act of Parliament; and that all parties using steam-boilers be registered—a competent inspector appointed in each town or district, whose duty it would be to inspect them at stated periods, and if considered unsafe, to have power to condemn them. Within the last three years, 1000 men and boys have been destroyed by explosions of boilers, to say nothing of the loss of property."

CORRESPONDENCE ON MINING PURSUITS.—A correspondent ("D. G. Ap D.") in a communication, which our limits prevent entire insertion, states that he has derived much gratification from the remarks of Mr. Ennor and others, which, from having stood the test of opposition, he has no doubt are founded on facts. He considers the communications of "Miriam" and "R. S." contain nothing tending to benefit the public; but it is such correspondents as Mr. Ennor, who throw out useful hints, that induce parties honestly interested in mining to peruse a publication so devoted to its well-being as the *Mining Journal*. He concludes by expressing a hope that Mr. Ennor will publish those views of mining generally, which have been promised in our columns. We may here observe, that we have a communication from Mr. Ennor on "Stream Tin" in type, which shall appear in our next.

Cotton Yarn."—We are not aware of the result of the trials of the gun-cotton engine alluded to; but we suppose it proved an entire failure in practice, and did not possess any of the capabilities and advantages claimed for it.

"An Adventurer" (Cornhill) can ascertain the particulars on application at the office.

"An Enquirer" (Walbrook).—There are no silver mines in Norway, with the exception of Kongsberg, which are the property of the Government. No lead has as yet been found in the country. The silver mines of Sala, in Sweden, have but a small production; they are the property of private individuals, and scarcely pay their cost. There are numberless other indications of silver lodes, but, from the difficulty of transport, expense of fuel, and other local causes, they have never been practically proved.

VENTILATION.—Sir: Having observed several accounts respecting the steam-jet now in operation at Seaton Delaval Colliery; and on referring to Mr. Phillips' Report on the Ventilation of Mines, I there find the quantity of air produced by it to be 82,32 ¹ cubic feet per minute; however, we will take the quantity as stated by Mr. Mather at Newcastle, to be 95,000 cubic feet per minute. I also find in the same report, that the quantity of air at Tyne Main is 94,810 cubic feet per minute; Haswell, 100,917 cubic feet per minute. Now, these two collieries are ventilated on the furnace principle, and are nearly the same depth as Seaton Delaval, with the size of the upcast (viz.: 8 feet diameter) the same, and with not above half the area of downcast; the temperature is also the same. I, therefore, wish to know wherein the great *superiority* of the steam-jet exists, when compared in practice to the furnace principle.—A PRACTICAL VIEWER: *Durham, April* 3.

VENTILATION.—Sir: Having read in your valuable Journal of the 5th inst., a suggestion made by one of your correspondents, to "prevent the accumulation of carburetted hydrogen gas in coal mines," I beg to offer the following for his consideration:—In order to produce ventilation in collieries, the first step to be taken is to rarify the air in one shaft, to cause the air to ascend in it, and to descend in the other; the former of which is designated an "upcast," and the latter a "downcast." Now, supposing the temperature of the upcast to be 150°, and that of the downcast and of the proposed bore holes to be 60°. *Query*, Whether would the air ascend or descend in the bore holes? —A PRACTICAL VIEWER: *Durham, April* 7.

THE SAFETY-VALVE.—On this subject a correspondent signing himself "Subscriber" (Accrington) remarks.—"What will the public think when they are informed that there is not the slightest protection in the safety-valve at present in use, in preventing explosions, when the exit of the steam is required instantly? My authority for this is no less than the late Sir John Leslie, formerly Professor of Natural Philosophy at Edinburgh. His recommendation was to have the opening for the escape of steam *square*, the valve being in the same form, resting on the top, and ground to a flat surface, or in engineering terms 'faced,' the area of the valve being about an inch for every horse-power. Such a valve, of which I have had two constructed during the last 12 years, will rise directly from its seat when the pressure becomes too great, and allows the steam free escape; but the conical valve, from the pressure of the steam on its surface, diminishing as the cone increases in size, and, on the occurrence of a backward action (explained in theory, I believe, only by Sir John Leslie), acquires little beyond a jumping motion, which sometimes fixes it firmly in its seat at the moment its real utility is required."

"An Engineer," also states that, in the year 1843, he deposited at the Society of Arts a model of a new double-action safety-valve which he had adopted, and which may be seen there. One portion of this valve acts as an ordinary safety-valve, to allow the usual blowing off, at working pressure; the other to allow the escape of any larger quantity which may be suddenly generated under any peculiar or extraordinary circumstances. Inspectors of steam-boilers, if appointed, should be empowered to compel the adoption of safety-valves of an area proportioned to the horse-power of the boiler.

"An Adventurer" (Redruth).—The subject is not lost sight of: in a week or two, we shall again have occasion to revert to it, when the particulars will be useful.

"R. W." (Lynn).—Consult a mine agent, who will advise as to the best course to pursue.

George Harris (Leominster).—All mines in the kingdom of Saxony, whether worked by the State or private individuals, are under the inspection of the Government: the Gescholwner and the Bergmester are obliged to visit them periodically, and make half-yearly reports to the Oberberg Hauptmand, whose residence is at Freiberg, in the vicinity of the Government Amalgamation and Smelting-works.

"H. E. N."—The subject of the communication shall be inquired into previous to our next publication.

PREVENTION OF EXPLOSIONS IN COAL MINES.—We have received copies of a correspondence between a Mr. John Dodman, of Potton, Beds, and the office of the Secretary of State for the Home Department, relative to a plan suggested by the former gentleman for the amelioration, if not the entire prevention, of explosions in collieries. In the first instance, Mr. Dodman having applied to Prince Albert, and by him referred to the Secretary of State; he wrote accordingly, receiving, in reply, an intimation that any plan might be forwarded, and if it appeared practicable it should be laid before the inspectors for their opinion. The inventor again wrote, stating that he must be guaranteed some privilege or reward equivalent to the public advantage gained; that he would willingly give it to the public, but that he was paralysed, and unfit for the active duties of life. If put in confidential communication with an inspector, he would lay his proposals before him. To this appeal the reply was—there were no funds at the disposal of the Secretary of State for such purpose; nor are we aware whether Mr. Dodman has communicated with Mr. Blackwell or Mr. Phillips, which he might easily do without any introduction from the Secretary of State's office. If Mr. Dodman can consistently furnish us with any particulars of his proposed plan, we shall be happy to render him any assistance, editorially, in our power, but so many vague and unscientific plans have been suggested, that much mistrust will exist against any plan not fully and publicly explained.

CONSUMPTION OF SMOKE.—Sir: Can any of your correspondents give some information with respect to Haig's Patent Smoke-consuming Apparatus, which was tried on board the *Ariel* for some time? Not having seen any account of the progress made lately, I am induced to seek through your Journal how the matter progresses; or whether it is likely to end where it commenced—namely, "in smoke."—A SUBSCRIBER.

"F. B." (Dover-road).—The account of the mortality, and average yield of gold per man, in California, published in the City Article of the 9th inst., appeared first in a condensed state in our Journal of the 29th of March.

ELECTRO-MAGNETISM AS A MOTIVE-POWER.—Some further observations on Mr. Hjorth's electro-magnetic engine will appear in our next Number.

Erratum.—In the article in our last Number, on the "Export Trade in Iron," page 162, column 2, line 42, for for "Index damnatur," &c., read "*Judex* damnatur," &c.

*** We must impress upon our correspondents, the necessity of invariably furnishing us with their names and addresses—not that their communications should, consequently, be noticed, but as an earnest to us of their good faith.

*** It is particularly requested that all communications may be addressed—

TO THE EDITOR,
Mining Journal Office,
26, FLEET-STREET, LONDON.

And Post-office orders made payable to Wm. Salmon Mansell, as acting for the proprietors

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, APRIL 12, 1851.

The MINING JOURNAL is published at about Eleven o'clock on Saturday morning, at the office, 26, Fleet-street, and can be obtained, before Twelve, of all news agents, at the Royal Exchange, and other parts of London.

Such has been the avidity with which every new mining scheme and prospectus have been received by the speculating public for several months past, that, notwithstanding our weekly caution, there appears no likelihood of the fever abating at present, if we may judge by the numerous companies now concocting and on the tapis; while "the cry is still, they come." We do not at all wish to create distrust so far as legitimate adventure is concerned, which, we are happy to state, is progressing in an entirely satisfactory manner; and to some undertakings—the prospectuses of which occasionally appear in our Journal—we would strongly recommend attention, as presenting the best of prospects; but it is to the numerous alluring schemes which are speciously introduced, as a *favour*, to "friends" and their acquaintances—*cum multis aliis*—though cautiously designated "for private circulation only," that we call attention. We say, unhesitatingly, avoid all those schemes whose projectors shun publicity. Our duty is to support the *bonâ fide* miner in every possible way; and our columns bear ample testimony of our endeavours and determination to support legitimate mining; further than this we cannot, as public journalists, go. We have a stricter duty to perform, which we have never hesitated doing—that of exposing trickery, and holding up the hand of caution to guide the unwary. Once for all, then, let us entreat our readers to ponder well over every new "bal" prospectus that may come before them, and make due and diligent inquiries as to the locality of the mine, the rate of dues exacted by the lords and bounders; then ascertain what the parties offering it for sale are to receive, for their expense and trouble; and, if they stipulate for situations, what pretensions they have to a knowledge of mining affairs; what premium they demand; what free shares they claim; and scrutinise further into the real object of the parties in, at times, so generously offering to the public a slice in their El Dorados.

We have had long years of experience in these matters; and the rigs and doings of 1825, 1835, and 1836, are still fresh upon our memory. We see something of the same game playing now as then, even by some of the veterans of those days; but as all cannot turn up trumps, if even intended, and the same sad result may naturally be expected to follow, we must ring the words "caution" and "beware" in the ears of all predisposed persons, for whom many of these prospectuses are more especially framed. If a person offers the acceptance of another to discount, men of business first make inquiries as to the solvency and character of both drawer and acceptor before they part with their cash. Why not, then, in mining? Bankers, agents, postmasters, and other respectable individuals, are to be found in mining districts, the same as in commercial towns. Were the precaution taken of first asking one or more of such persons a plain business-like question, there would be less "*Wheal do 'ems,*" and "*Wheal done 'ems.*"

A reference to our Journal of to-day will show the actual dividends made during each of the last three months from mines working and realising profit by employing the mining labourers, and encouraging them to bring up the ores from below, and not, as many schemes now afloat are, for the mere traffic in shares from day to day and hour to hour. This list is certainly encouraging; and, with a fair price for our metals, we see no reason to doubt the continuance of prosperity in many of them, nor that our future monthly list will prove equally as profitable. Still we are induced to impose on ourselves the onerous task of extracting from our columns a list of another character—viz.: the calls that have been made during the same period; and conclude by urging all our readers to "Look upon this picture and on that." That a vast portion of the calls are being judiciously embarked, and in mines of great promise, worthy of such outlay, we are perfectly satisfied; at the same time, "there is much chaff among the best wheat," and great caution is necessary.

From a notice in our advertising columns, it will be seen that the MINING EXCHANGE is formed. The rooms they occupy at present are only temporary. More than 20 of the most influential agents have agreed to enter into the propositions put forward by the committee; and we may now expect that the evils which have hitherto been complained of will be remedied, and that great desideratum—an official share list, published. The spirit of mining at present is rife; and although many good concerns will be, no doubt, brought forward in the present eventful year, we cannot disguise from ourselves the fact that "bal" selling will be attempted by some unprincipled individuals. From the fact of the committee determining to place no mine on their list unless approved of, we augur much good may be done, that fraud will be checked, and the spirit of legitimate mining enterprise promoted. The rules will be found sufficiently stringent to prevent the admission of unqualified parties; and we feel convinced, from the high standing of the gentlemen forming the committee, that affairs will be transacted on a firm and satisfactory basis. Bye-laws have yet to be made, and these, we trust, will be couched in that honourable spirit which appears to have actuated the provisional committee in the present instance.

The immense importance of the mining interest, together with the large capital invested in mineral pursuits, has long demanded a proper place for business, where a guarantee could be afforded to the public that all was fair and honestly intended; and we believe that as soon as the "Mining Exchange" comes into working activity, and its sphere of usefulness enlarged, that many of the complaints which have from time to time appeared in our columns will be rendered nugatory, and those opportunities for jobbing which we have been told were so prevalent will be as the "things that were." Adventurers will now have an open market, and it will be their own fault if they do not avail themselves of the advantages offered to them. It cannot now be said there is no place where the real value of shares can be known, and the public will have a guarantee as to what mines are desirable investments or not. Should this be effectually carried out, the capital which has been recklessly expended to gratify the cupidity of grasping adventurers will be saved, and diverted into honest and respectable channels, and the mining interest will assume that position and character which its magnitude so eminently deserves. It would be premature for us to make any further remarks; the arrangement is but provisional, and probably in a week or 10 days will be on a more solid basis. It was intended at one period that the Mining Exchange should have been a portion of the Stock Exchange, and negociations were entered into with that body, but no committee having been held for some time past, difficulties appeared to be thrown in the way of those representing mining enterprise. Under all the circumstances, we conceive they have done wisely in forming themselves into an independent body, and our sincere wish is that they may "go on and prosper."

An interesting and somewhat important railway compensation case was heard last week at the Castle Inn, Neath, before Mr. G. POWELL, the umpire appointed by the Railway Commissioners, to decide upon the amount of loss and damage sustained by the Neath Abbey Coal and Iron Company, in consequence of the construction of the South Wales Railway at Britonferry. Mr. JAMES, the counsel for the plaintiffs, explained the circumstances under which the claims were advanced, and put in the necessary legal documents to prove the claimants' title. From the evidence of Mr. W. P. STRUVE, C.E., of Swansea, Mr. JOSHUA RICHARDSON, C.E., of Neath, Mr. THOMAS, colliery manager at Cwm Avon, Mr. WILLIAMS, underground agent at Britonferry, Capt. EDWARDS, the harbour master of Swansea, and others, it was proved that the property at Britonferry had been materially lessened in value by the construction of the railway. Mr. STRUVE, in particular, was well acquainted with the seams of coal now worked by the Neath Abbey Company, and believed there was sufficient, at even 300 tons *per diem*, to last out 87 years, the period of the lease. The railway had considerably increased the cost of shipment, by destroying a quay and wharf at the head of a navigable channel, which had cost a large sum, and which had thus increased the distance for haulage from 700 to 1050 yards. In conjunction with Mr. RICE HOPKINS and Mr. RICHARDSON, he had carefully estimated the damages sustained, which he calculated at 7796*l.*, which sum covered the extra expense of iron manufacture provided for in the lease, but which had been postponed until the coal workings were more fully developed. Mr. THOMAS stated that the workings were of great extent, capable of producing 700 tons per day, and have produced much more. He then detailed the cost, showing a handsome profit from its sale, and stated its quality to be excellent. Mr. RICHARDSON confirmed Mr. STRUVE's evidence, and stated that he had originally made a much higher estimate, but had consented to reduce it to the amount mentioned, from the repeatedly expressed wish by Mr. PRICE, one of the owners, that the lowest estimates consistent with justice should be formed. Mr. HOPKINS supported the same view, and fully concurred in the amount. The witnesses were all cross-examined by Mr. LLOYD, for the railway company; but the evidence was unshaken.

From the evidence produced for the defence, it was attempted to be shown that the coal could only be worked at a loss; but one of the witnesses, Mr. JAMES CADMAN, general manager at the Tonddu Iron-works, would give no reason for, or details of, such opinion; and Mr. BOND, another witness, had got his experience solely in the Staffordshire coal-field, and could know little of the comparatively narrow seams of Wales. Several pilots on both sides were called, to show the value, or otherwise, of the harbour accommodation, decidedly in favour of plaintiffs' case. Mr. LLOYD addressed the court for an hour and three-quarters, attempting to detract from the value of the evidence; but was met by Mr. JAMES in a masterly speech, in which he ably combatted every position assumed by the other side. He contrasted the evidence, and showed that that for the plaintiffs' was, in many material points, supported by the opposing witnesses; that his engineering witnesses were gentlemen of respectability, long acquainted with the neighbourhood and the coal district; while those on the railway side were comparatively strangers. He left the case in the umpire's hands with perfect confidence, fully satisfied that he had proved his right to compensation, and that the amount demanded was only equal to the injuries sustained.

We have on all occasions advocated that British capital should be embarked in home investments in preference to foreign adventures, and we have from time to time, without endeavouring to damage any undertaking, either at home or abroad, recommended that speculators who entered into a concern, with a *bonâ fide* intention of prosecuting it, should do so with great caution. It may be in the recollection of our readers that about two years since the prospectus of a company was ushered into public notice, entitled the VALLEY OF LOETCHEN MINING AND SMELTING COMPANY. This stated that there were large quantities of silver-lead ore at surface, and the fact was that nearly the whole mountain was composed of silver-lead. At that period we took occasion to comment on the extravagant statements contained therein, and gently to express our disbelief in their existence. Subsequently we saw some good prills from the lode in question, but none such as to warrant the inflated reports circulated of them. The history of this embryo company is melancholy, but brief: a party of Englishmen were induced to purchase the concession of the mines from some Swiss-Italian *avanturiers*, who had at the same time sold them to another party, under different legal titles, of which there was a dispute Offices were taken in London, litigation was commenced in Switzerland, the cause was decided in one court, then referred to another, appeals were made, and no final decision was come to. At this point of the contest one of the contending parties was forced to give way, we understand, from the cogent reason, which will be particularly applicable here, "*Point d'argent, point de Suisse.*"

Their rivals were triumphant, and imagined they had gained the victory: smelters were engaged, operations immediately commenced, and a determination expressed to prosecute the works with extraordinary vigour. What has been the issue? Capital to the amount of 8000*l.* has been wastefully and recklessly thrown away; the winning party are at loggerheads among themselves, and are in doubt whether their staff is inefficient, or that they have been deceived by the original concessionaries of the mine. How much better would it have been had competent persons been sent out in the first instance to have inspected and reported on the capabilities of the property? What litigation, dissatisfaction, and, in this instance we know positively, what ruin and misery might have been avoided. We make no further comment, as we are unwilling to give unnecessary pain to those who have already so fearfully suffered. It may be, however, some consolation, with their British astuteness and Anglo-Saxon energy, to know that they have not been the first victims in this same undertaking.

The annual general meeting of the COPPER MINERS' COMPANY IN ENGLAND was held on Saturday last, when Mr. JACOB ALSTON was elected Governor, Mr. J. H. PELLY Deputy-Governor, and Messrs. CUMMINS, MACDONNEL, GUPPY, VIGORS, SHAWE, GRANGER, PAULL, ENTHOVEN, LOGAN, and MORRISON were nominated assistants. The discussion was of rather a strong nature; recriminating words were used, and we regret that the vulgar tongue was used in its fullest extent at the meeting. One of our contemporaries has been pleased to say that our deductions with regard to the proposed bill are enormous, and that the Copper Miners' Company, labouring under peculiar circumstances, their enactment, if passed into law, cannot be taken as a precedent. On this point we must differ with our contemporary. If a mining or smelting company can get rid of their liabilities by an Act of Parliament, surely railways, involving a larger stake of capital, should have the same justice meted to them; and we know of some two or three properties in the same position, who will apply for the like relief the moment that they see the bill for the regulation of the Copper Miners' Company becomes the law of the land. Having dilated so much on the bill in our last week's Journal, it is unnecessary for us further to enter into detail here. We must add, that we have that confidence in the sense of justice entertained by the Committee of the House of Commons that they will throw out this iniquitous measure, which offers a premium to mismanagement, and can only tend to encourage dishonesty, fraud, and their concomitant evils.

Our attention has been called to the remarks which appeared in last week's Journal, touching the KENMARE AND WEST OF IRELAND COPPER AND SILVER-LEAD MINING COMPANY—on which subject a communication appears in another column. We are well pleased to insert this explanation, as being calculated to set the matter right with the public, which is ever our object, leaving it to our correspondents to support and maintain the views they may entertain or put forth. It appears, from the letter before us, that "the amount required for the mine and plant is a trifle above the estimate made by Capt. W. THOMAS"—a gentleman well known to us, and on whose report we consider much confidence may be placed—leaving a surplus out of the 20,000*l.* of about three-fourths for the working capital, or 15,000*l.*, much more, as we are inclined to believe, than will ever be required; but we are told "the directors hope to extend their operations in the district," which we also hope, and shall be happy to congratulate them upon. That this property will ultimately become "highly productive and remunerative to the shareholders," we do not doubt. If too sanguine expectations are not entertained, beneficial results to all parties will arise. The whole of the papers were with us long before the "Incumbered Estates' Commission" held the property, from which we augured favourably; and it is only to guard the public from false representations that we are induced to direct attention to any speculation which may possibly have the effect of advancing the undertaking simply in the market. That it must be advantageous to the district by the employment of the peasantry, we readily admit, "as well as an adjunct, if not precursor, to the development of the mining and other interests of that district of Ireland which, from local causes, have so long lain dormant." We can only, in conclusion, direct attention to the mineral deposits of Ireland, and invite our correspondents to communicate information on mines and minerals, which may not only be beneficial to themselves, but instructive to the visitors of the "Industrial Exhibition" and our capitalists at home.

STATISTICS OF LEAD AND TIN.

In our summary, in last week's Journal, of the sales of lead and tin, our attention has been called to some omissions—the amounts of which we now willingly insert, disclaiming, however, any acknowledgment of error on our part, as we have followed our usual course of giving only the contents of the official ticketing papers, without reference to sales shown at the periodical meetings. We may here again call the attention of agents to the subject, and again repeat what we have often before expressed, that we shall feel obliged for information of all sales of tin and lead ores, as in future we intend to add all we can obtain through other sources than the ticketings, which we find are but poor indications of the actual amount sold. Bwlch Consols returns we have stated at 30 tons, realising 440*l.*; whereas the actual returns were 110 tons, and money, 1648*l.* 7s. 6d. There is a very material difference in these statements, giving an unfavourable view of the mine in one instance, and in the true one ranking it among the most productive mines of Cardiganshire. The profit for Feb., in the last month's account closed, was 216*l.* 19s., in which month there were sold 45 tons, at 14*l.* 16s. 6d. per ton; and in April, 45 tons, at 15*l.* 1s. per ton. In the tin returns we omitted, through the absence of the necessary official information, Polberrow—105 tons 1 cwt. 0 qrs. 21 lbs., realising 5116*l.* 1s. 8d.; and Botallack, 60 tons 3 cwts. 0 qrs. 20 lbs., realising 3387*l.* 14s. 2d.—making the totals 488 tons 15 cwts. 3 qrs. 25 lbs., and 24,056*l.* 15s. 8d., instead of 282 tons 16 cwts. 3 qrs. 24 lbs. and 13,546*l.* 15s. 8d.

MANUFACTURE OF IRON IN INDIA.

The greatly superior quality, and the absolute inexhaustibility of the magnetic iron ores of India, more particularly those of the presidency of Madras, have long been known and estimated, although circumstances of a local nature have prevented the development of those important mineral treasures, and rendered necessary the importation into that country of large quantities of British iron—in the last year alone, from London and Liverpool, to the extent of 55,000 tons. That an establishment for the manufacture of pure charcoal iron in British India, unsurpassed in quality by that of Sweden, or any other district of the globe, would prove one of considerable profit and success, there could not be a doubt; and for some years the manufacture has been carried on in the south of the peninsula by a company having works at Beypore, on the Malabar coast, and at Porto Novo, on the coast of Coromandel. The proposed development of the railway system in the British possessions of India, and the vast extension of trade and commerce which will take place in consequence, in which that of iron must form a large amount, has induced some gentlemen connected with that country to promote and support an enterprise under the title of the EAST INDIA IRON COMPANY—the object being to extend the existing manufacture, both of iron and steel, in British India on European principles, for the supply of the Asiatic markets, and the construction and maintenance of the railways of India, Ceylon, and other places in the East. The supply of superior charcoal iron to the English market is also an ultimate object. Great advantages result to the iron and steel trades of this country from an abundant and cheap supply of charcoal iron through this company, and they have had hitherto no better customers than the Low Moor Company and Thorneycrofts, of Wolverhampton, to mix with their Staffordshire pig, for the manufacture of best boiler-plate. The tin-plate trade are also good customers. The company possess, by grants from the Madras Government, the exclusive right of raising the magnetic iron ores of the presidency, which are the richest known, yielding 68 per cent. of metal, with similar rights with regard to the chrome ores, of which considerable deposits exist, and have been proved by the existing company. They also hold from the Government leases of very extensive tracts of wood land at a low rent, embracing all the jungles and underwood best suited for the purposes of the company. They have also obtained from native landholders land grants on leases over many hundred square miles of ore grounds and interminable forests, and also property in a hill of magnetic iron ore, which alone may be called inexhaustible. The endeavour to establish a new manufacture of this description in a distant country, with untried materials, and an ignorance of the peculiar circumstances attending it, is at all times an undertaking of serious doubt and difficulty; but a company having been some years in existence, endowed with privileges from the Government, and with considerable experience, whose works and well-trained native staff are to be transferred to the new and more extended East India Iron Company, it does, without the risks, expenses, and delays inseparable to such new undertakings, come at once into possession of established works, sufficient, with some additions, for the scale of manufacture contemplated during the first few years. It has been estimated, after most careful calculations, that on a sale of 18,000 tons of iron and castings within a year, a profit of 14 per cent, will be realised; and with an increased sale there would, of course, be a corresponding increase. The capital proposed is 400,000*l.*, in 40,000 shares, with power to increase it—the company to be incorporated. The shares are to be divided into 20,000 preference shares, class A, and 20,000 class B; 50,000*l.* to be paid in cash for the present company's interest in the works, machinery, plant, ores, and fuel. From the annual profits 7 per cent. is to be first paid to class A shares, then 7 per cent. to class B, or as far as it goes; any excess to be divided, and after five years' constant payment of a 7 per cent. dividend on the whole capital, the payments to be equally divided between the two classes. The growing wants of India, with the value of its iron ores, and the facility for supplying not only the East, but the markets of Europe with metal of a superior kind at a low cost, opens a field in which there is every prospect of such a company reaping an abundant harvest.

INFRINGEMENT OF PATENT RIGHT—RAILWAY AXLES.—A case of importance, as connected with the Patent Laws, but which, divested of legal technicalities and tergiversation, lies in a nutshell, was tried at the South Lancashire Assizes, before Mr. Baron Platt, on Monday last. The plaintiff was Mr. Newton, the well-known patent agent of Chancery-lane, and the defendant was Baron, or James Vaucher. On the 15th of May, 1843, Mr. Newton took out a patent for a Mr. Babbit, of the United States, for a soft metal-bearing for axles, prevented from spreading by a rim turned on the end of the journal, and which was perfectly successful in preventing the metal becoming overheated—an evil of much magnitude previously. In 1849, Vaucher pretended to discover that a patent of his, taken out in 1838, embraced Mr. Newton's improvement, and he accordingly took out a patent—a barefaced infringement of the plantiff's, and made axles similar, to prevent which the present action was brought. It proved that Vaucher's first patent was for securing a steam or water-tight joint, and had no relation to friction. The Judge said, if a man took out a patent for a certain purpose, and did not suggest others, then the man who applied similar means to another purpose would be an inventor. It was certainly strange that defendant should take out a patent in 1849 for doing what he was entitled to by a patent of 1838. The jury gave a verdict for plaintiff on all the counts, and nominal damages were agreed to.

RECKLESS CONDUCT IN A COAL-PIT.—A wholesome example to the working colliers has been made by the magistrates at Wigan, in the case of Josiah Herdsman, who was brought before them charged with taking off the top of his lamp, and thereby placing the lives of 50 men and boys in jeopardy, in Wood's Cannel Pit, at Aspull, belonging to the Earl of Balcarras, in which he worked. Mr. James Shepherd, the overlooker, stated that, the pit being a very dangerous one, no naked lights were allowed, or blasting by gunpowder, and when the coal was very hard extra prices were allowed. On going down the pit he distinctly smelled the snuff of a lamp, and, going up to Herdsman, accused him with the offence, which he at first denied, but afterwards acknowledged, saying his oil was bad. He was immediately discharged, having been before pardoned for a similar offence. Had there been a fall of roof about the time of the reckless act, Mr. Shepherd believed not a life would have been saved. The magistrates sentenced him to 14 days' imprisonment.

SUPPLY OF WATER TO THE METROPOLIS.—We are informed, on undoubted authority, that Government have abandoned the idea of adopting any of the proposals for the supply of water, but that a proposition will be submitted to Parliament, having for its object the taking up all the water companies, giving 6 per cent. interest on the capital invested; and there is no doubt but such a measure, if properly carried out, would be highly beneficial to the community.

OCEAN STEAMING AT FIFTY MILES AN HOUR.—The inventor of this novel method of steaming proposes to have round instead of long boats, and concave instead of convex boats.

The blocks have been all laid, and the keel prepared, for commencing immediately at Deptford dockyard a paddle-wheel steam-sloop, named the *Cruizer*.

PLANK ROADS.—This description of road has been extensively constructed in New York, and, instead of lessening the disposition for railroads, has very sensibly contributed to render them not only more necessary, but more lucrative. The progress of both is shown by late official reports to have been as follows:—

	1846.		1850.	
	Miles.	Cost.	Miles.	Cost.
Railroads	754	$ 24,691,730	1284	$ 60,769,797
Plank roads	—	—	2106	3,860,728
Total	754	$24,691,730	3390	$64,630,525

The plank roads have cost on an average $1833 per mile. A pair of horses on such a road perform treble the work they could do on a common road in good order, while their improved condition and diminished cost far more than make up for the outlay in tolls. The building of a plank road or railroad is equal to a reduction of the tariff. The want of such works is an artificial barrier to intercourse and commerce, while a duty on imports is a legal barrier. The construction of the one, and the removal of the other, are the means of making labour productive.

LARGE INGOT OF STEEL.—An ingot of steel of the enormous weight of 24 cwts., was cast at Messrs. T. Turton and Son's Sheaf Works. It is designed for one of a pair of marine-engine piston-rods intended for the Exhibition. The contents of 48 crucibles, each holding 58 lbs. of liquid steel, were poured into the gigantic mould, occupying eight minutes, and 45 workmen were engaged in the process.—*Sheffield Times.*

"AS LIGHT AS A FEATHER."—The largest quill of the golden eagle weighs only 65 grains, and seven such quills do not weigh more than a copper penny-piece. The feathers of a common fowl, weighing 37 ozs., weigh only 3 ozs.; and the entire plumage of an owl weighs only 1½ oz.

Original Correspondence.

CHEAP COAL.

SIR,—Much has been said about the coal monopoly in the north, and the high price of this fuel in London has been attributed to a combination among the colliery owners. That this was the case in past times there is no reason to doubt, but an inspection of your coal market returns clearly shows that if coal be unreasonably dear in London, it ought not be attributed to such a cause. The prices quoted in your last Journal vary from 11s. to 15s. per ton, and as the freight from Newcastle to London is from 6s. to 6s. 9d. per ton, if we take the average market price at 13s., and the freight at 6s. 4½d., it only leaves the coalowner 6s. 7½d. per ton. When it is borne in mind that the coal sent to London is all screened, and that the small extracted from it is usually wasted, this price is as low as can be afforded, to be at all remunerative. Upon this point there can scarcely be a difference of opinion among those who are competent to give one, and who know, from experience, the cost of production. If the consumers in the metropolis pay an exorbitant price, it is not attributable to the large profits derived by the coalowners, but to the charges imposed upon it after its arrival in the Thames. The London charges, expenses, and profits, are usually as much, and frequently *considerably more*, than the price of the coal delivered on ship-board in the Tyne, the Wear, or the Tees. Without terming the London charges exorbitant, it is obvious that they are so large as to give ample margin for a considerable reduction. The advocates for cheap fuel should, therefore, direct their energies to an abolition of the London dues, and encourage those merchants who impose moderate profits, if they wish to be successful; and, if, instead of taking long credit, they would pay ready money for their coal, they would find little difficulty in obtaining it at a reasonable price. A friend of mine, residing in Westminster, has informed me that, about a fortnight ago, he had the best Newcastle coal delivered into his cellar for 19s. per ton, ready money.

The Yorkshire, and other midland counties coal, is of a different and inferior quality to that of the Newcastle district, which is sent to London; and for domestic purposes, at least, is certainly not so valuable as that from the north; so that even supposing it be sold at a somewhat lower price, it by no means follows that it is a cheaper fuel. Quality, as well as price, ought to be taken into account, and if this be done, it will be long before the supply of London be derived from Yorkshire. Hitherto the inferior coals in the northern district have been kept out of the London market, to the great advantage of the consumers; but if inferior land-carried coals be forced into consumption, it will obviously be a great inducement to import coal of a similar quality from the existing principal sources of supply, and the consequences will be that the consumers annual expenditure for fuel will be considerably increased, even though he obtains it at 1s. to 2s. per ton less than at present. The quantity of light ashes produced by inferior coal will also tend to an increased expense, by injuring the upholstery and furniture, besides the discomfort which will be experienced from the clouds of dust which will arise every time the fire is stirred, and cover the side-boards, tables, &c., with a thick coat of dust many times a day. It is evident, therefore, that little good will be effected by encouraging the introduction of inferior coal; and that as the price obtained by the coalowners in the north will not bear reduction, the consumers would best consult their own interests by directing their attention to the charges to which it is subjected in London, and endeavouring to obtain a diminution of them.—J. RICHARDSON, C.E.: *Neath, April 5.*

COLLIERY ACCIDENTS—LIFE INSURANCE.

SIR,—I have, during the past year, watched with great surprise that, out of the number of your correspondents who are sensitively alive to the welfare and interests of the working collier, *not one* has raised his benevolent voice in favour of the adoption of life insurance, to provide maintenance for the families of those sufferers, *at least*, who fall by that portion of accidents, which even they admit are unavoidable. The advantage is so palpable—so devoid of dispute, contingency, or doubt—that I certainly did expect these humane persons would have been even unusually loud and incessant in their commendation of so direct an alleviation of the calamities of that class whose keeping they so exclusively assume. This total abstinence is the more singular, because some of them have, in times past, been active in recommending associations for mutual insurance amongst the men themselves; but now, when an insurance company is instituted for this especial object, under a direction of the highest responsibility, possessing the most accomplished advice in the calculation and managements of their plans—the assurances, therefore, placed beyond all risk and uncertainty on a guaranteed footing, which never could exist in any associations which the men alone established, necessarily partial in their operation, even in the most favourable cases, struggling against the difficulty of obtaining sound local management, and in most localities not existing at all—when, I repeat, a system which they have advocated is rendered effective and permanent, on a wide and indisputable basis, these persons are *all silent*, I must say it is, at the least, singular. By a late advertisement, I perceive the Accidental Death Insurance Company have extended the benefit of their policies to insure relief to sufferers from temporary accidents not resulting in death. Now, really, amongst those inconsistencies of principle which unfortunately so much distinguish the public acts of men, is it easy, or is it possible, to fix upon any more truly absurd than that amongst individuals who make it their constant business to take exclusive possession of the feelings of humanity towards the working collier, to protect his interests, and level their censure against the defaults of all around them, *not one* should have thought it worth his while to call the attention of that industrious body to the great benefit they have now the power of obtaining by a small weekly or monthly payment, amounting, except in particularly dangerous cases, only to an additional fraction on the sum already deducted to provide for medical attendance? Who can fail to see not only the immediate but the contingent benefits to the working collier which must arise from the general adoption of the system? Take, for instance, the case of dispute which has lately attracted so much attention in the Jarrow Colliery. If the same insurance agents who granted policies to the men of Hebburn and Wall's-End were to refuse to insure the lives of the colliers of Jarrow, with what force would this fact tell, and do more to remedy the dangers which are alleged to exist, than 100 folios of dispute and recriminative opinion. I must say that the palsy which has struck the tongue of the humane, *par eminence*, upon this important and interesting question, is a phenomenon very hard to be understood. The cases which, from time to time, meet public notice, and are hailed with gratified satisfaction, respecting provisions made for the families of unfortunate railway servants, through the agency of the Railway Assurance Company, seem to point so directly to similar benefits, which are placed within reach of the working collier, that it is astonishing that even the most obtuse perceptions should have failed to discover the affinity, and exert themselves in proclaiming it. I cannot explain how so grateful a perfume should have failed to reach the organs of those whose highly sensitive nostrils are always on the scent of compassion. I certainly have known many benevolent persons who never will exercise their faculty, except in their own way. History abounds with such instances. For a great example; who have more distinguished themselves in this manner than the Popish priests? Purely disinterested (for did they not assert themselves free from ambition, covetousness, or any worldly motive?) they volunteered the painful trouble of studying and devising the invention of every species of torment, merely out of kindness for the simple good of others. Is it some such refined and exalted humanity which actuates the inspectionists? Do they rest in the firm belief that to deprive widows and orphans, even for 10 years to come, of the provision which is now offered to them is, in fact, the greatest of mercies, if such deprival can only be made an availing aid for procuring them eventually the greater boon, at a much greater cost, of the promised protection of a numerous host of sub-inspectors? Do they fear that by advocating at this time a system of insurance, which, from their former advocacy, we know that they approve, it might act like oil upon the waves and calm the tempest, whose furious raging they calculate will drive them into the haven of their desires? Certainly, if inspection, *per se*, be so transcendent a benefit that the most palpable and effective advantages are, *ad interim*, to be withheld from the working collier, and all other relief kept back, lest it may interfere with the attainment of a greater relief, the conduct of those who once advocated a provision for their misfortunes, and are now silent upon it, may then, and only then, be esteemed consistent.

Let us hope, when they have achieved *their* object, they will then recur, with all the animation which distinguishes them, to the common-place and less exciting kindness of administering to destitution. It is the province of practical wisdom to seize and realise the good which is before it. The superior range of intellect of the benevolent theorist leads him to trample upon all such present matters for a nobler scheme of distant and imaginative acquisitions. The loss of present good is of no account. The secretaries, treasurers, &c., of such benevolent unions, extract in one twelvemonth from the workmen of a particular district sums more than sufficient to insure the whole colliery population of the kingdom for 10 years at least. But what does that signify? Is not the money bestowed upon their *disinterested friends*, who have great and nameless things in store for them? Is it true that, but for the active efforts of such characters, in maintaining a state of warfare betwixt servant and employer, the masters would be very glad indeed to relieve themselves of undeserved odium, and a very great amount of contingent expense, by contributing themselves the premium for the insurance of their men, instead of deducting it in periodical payments out of wages. But what of that? How can such a common-place everyday object of desire as a maintenance for those whom calamity leaves desolate be weighed for a moment against so great an accomplishment as investing with the office of sub-inspector, their assiduous friends, the treasurers, secretaries, or other impersonations of the abstract sphere of intellectual activity? In order rightly to understand a subject, we must place ourselves in the position from which others view it. We shall then perceive similar advantages; but by wilfully adhering to the stale track of common sense and common feeling, we are deprived of the goodly prospect which stretches before the impartial, disinterested, and elevated mind. Is not the reputation of *promising* to prevent death a far more lovely and attractive position than to be occupied in the dull work of healing the affliction of the relatives of those who are already dead, and whose voices can, therefore, add nothing to the clamour of influence or praise?

March 29. DAVID MUSHET.

NITSHILL COLLIERY EXPLOSION.

SIR,—Is it true that Nitshill Colliery, for four months previous to the explosion, had no means of ventilation? That there was neither furnace, fan ventilation, steam-jet, or any other process for procuring air; but that the whole mine, it is stated the most fiery in Scotland, was left to natural, or rather, no ventilation? If this be fact, it is but right the Government Inspectors' attention, and that of the official authorities of Scotland, should be called to this important point; for I see this destructive mine is called well ventilated, which I take to be a physical impossibility.

April 8. INQUIRER.

BLAENAVON IRON AND COAL COMPANY.

SIR,—On looking over your list of mining shares, I was astonished at seeing this company quoted at so low a figure. Being a resident of Blaenavon for upwards of 20 years, I naturally began to think what could be the reason of the shares being so low, and I soon found that it was a want of confidence in the capabilities of the concern. Permit me, through your Journal, to give a brief description of the property, in the hope that the shareholders may take courage, and bring out the resources of the inexhaustible mine of wealth they have now in their hands. The property is generally considered one of the very best in the mineral basin of South Wales, and the quality of the iron stands unrivalled. The estate extends about 16 square miles, full of rich iron ores, and an inexhaustible supply of coal suitable for shipping and other purposes. It is bounded on the north by a mountain of the finest specimen of limestone for smelting and other purposes known in the world. The purchase of the mineral property, works, houses, land, &c., cost the present company 290,000*l.*, and a further capital has been expended of 200,000*l.*, partly in erecting six new furnaces and a mill and forge (which is yet incomplete), and improving the old works, making the total outlay nearly half a million sterling. It can be satisfactorily proved by practical men that if the works already began were completed, a nett profit of at least 15 per cent. would accrue to the shareholders for all the capital expended.

I hope that, at the coming general meeting, the directors will be prepared with some comprehensive scheme for raising a sufficient capital for the completion of the half-finished works; and that the shareholders will look after their own interests, and not lose such a valuable opportunity of realising a large profit for a comparatively small outlay.

Blaenavon, April 10. A LOOKER-ON.

THE GREAT EXHIBITION—PROVISIONAL PROTECTION OF INVENTIONS.

SIR,—After an unsuccessful attempt, last session, to provide provisional protection for any inventions exhibited at the Crystal Palace, the commissioners have at last been able to induce the Parliament to pass an Act for this purpose. But even this long-delayed measure is not an efficient one, because there is no proviso to guard against the clashing of the patent system with the provisionally protected articles exhibited; thus those persons who have patents granted previous to the Exhibition, no description deposited with the patent officers, and thus unspecified, will be enabled, if they choose, to include anything they may see at the Glass Palace, and claim it as their invention; and notwithstanding the Attorney-General's order of 2d November last, numbers of patentees are in a condition to do this. Under these circumstances, it will be necessary for inventors to be advised as *to whether the state of the unspecified patents will allow them to avail themselves of the Act, and exhibit with safety.*

The principal points of the Act are these:—

1. Any new invention, proper for letters patent, may be exhibited at any place, certified by the Board of Trade, and yet entitle the inventor to subsequent letters patent, provided there be no other public exhibition or use. The inventor to be allowed to contract for the sale of his right to the invention; and no publication in any catalogue, newspaper, &c., to affect the validity of the letters patent; patents may be dated as early as the day of provisional registration.

2. The Attorney-General, his deputy, or deputies, to receive and examine descriptions of new inventions taking advantage of the Act, and to give certificate of approval.

3. The Registrar of Designs is to register this certificate, and to give certificate of such registration.

4. Inventions to be marked "*provisionally registered;*" and regulations as to custody of descriptions to be made by Attorney-General.

5. Provisional registration to confer fully the same rights, &c., as provisional registration of designs.

6. Designs which have been known abroad may be provisionally registered and protected, provided no public sale, or exposure for sale, has taken place.

7. Agricultural and horticultural inventions may be publicly tried by the Commissioners of the Great Exhibition, without affecting the validity of subsequent letters patent.

At present, permanent patent reform remains in *statu quo*. As soon as any progress is made, I shall be happy to inform the public.

Patent office, Strand, April 10. F. W. CAMPIN.

GOLD USED BY DENTISTS.

SIR,—The cautionary paragraph upon the above subject, which has appeared in so many of the London and country journals, and which, I perceive, was also inserted in yours of the 5th inst., has been instrumental in drawing the attention of the public very forcibly to the danger incurred by the use of base and impure metals for the foundation, or mouth-plates, for artificial teeth; but I find, that although the paragraph in question is very explicit, and specially mentions silver, that many persons are not alive to its full importance. It appears to be considered that danger to the health can only arise from the use of mixed metals containing large proportions of copper or other alloys, and that silver is perfectly safe and innocuous. Observing the attention usually given by your paper to scientific subjects, I shall be obliged if you will allow your columns to be the medium of correcting so prevailing an error.

In most of my letters I have said "pure gold is the only metal that should ever be used for dental purposes;"—this I repeat most emphatically. Silver, though considered generally a pure metal, is not so when placed in the mouth, but is as dangerous and deleterious as any of the base compounds, inasmuch as that the purer the silver the greater is the avidity with which it absorbs oxygen, which, as is well known to chemists, forms the principal constituent of saliva. An oxide of silver is thus constantly forming in the mouth, which is received with the food into the stomach, where other active chemical compounds are produced, such as the *nitrate, muriate,* and *malate* of silver—the effect of which is to destroy the chyle intended by Nature for the nutrition of the body: thus is produced a mysterious train of symptoms, which baffle medical science and skill, and slowly, but inevitably, terminate fatally.

That the quantity of silver in use by the low-priced dentists is very great, my daily experience convinces me, for I constantly remove plates of that metal from the mouth blackened and decayed—in fact, honey-combed by the action of the stomachic acids—the wearers of which I invariably find suffering under the most distressing dyspepsia, while the adjacent teeth with which it comes in contact are completely destroyed.

W. H. MOGRIDGE, Surgeon Dentist to the Royal Family,

13, *Old Burlington street, Bond-street, April* 11.

IMPROVEMENTS IN ELECTRO-TELEGRAPHIC INSTRUMENTS.

We have in type an article descriptive of Mr. George Little's patented improvements in instruments for communicating between distant stations by galvanic electricity, illustrated by a series of diagrams, which take up a considerable portion of space, and which a very great accumulation of important matter, at a late hour, prevents our inserting. They will, however, appear in our next Number; and we think we shall not be assuming too much, when we say they will present to our readers one of the most important modifications in the manipulation of the electric telegraph which has ever been introduced since its first being made public.

EAST INDIAN IRON COMPANY.

(PROVISIONALLY REGISTERED.)

Capital Four Hundred Thousand Pounds (with powers to increase the same), In 40,000 shares, of £10 each.

To be Incorporated by Royal Charter or Act, limiting the liability of the shareholders to the amount of their respective shares.

PROVISIONAL DIRECTORS.

CHAIRMAN.

HENRY AGLIONBY AGLIONBY, Esq., M.P. (Chairman of the East Indian Railway Co.)

DEPUTY-CHAIRMAN.

JOHN UTLAY ELLIS, Esq. (Messrs. Parry and Co., Madras.)
ANDREW BONAR, Esq. (late Messrs. Small, Colquhoun, and Co.)
CHARLES DASHWOOD BRUCE, Esq. (Messrs. Alexander, Fletcher, and Co.)
JAMES DENIS DE VITRE, Esq. (late of the Hon. East India Company's Civil Service, Bombay Establishment.)
WILLIAM JOHN HAMILTON, Esq. (Deputy-Chairman of the Great Indian Peninsular Railway Company.)
JAMES HARTLEY, Esq. (Director of the Peninsular and Oriental Steam Navigation Co.)
JAMES WALKER, Esq. (late of the Hon. East India Company's Service, Bombay.)

With power to add to their number.

Bankers—Messrs. Smith, Payne, and Smiths.

Solicitors—Messrs. J. C. & H. Freshfield.

Auditor—J. E. Coleman, Esq. | Secretary—G. E. Cooper, Esq.

OFFICES,—No. 2, MOORGATE-STREET, LONDON.

The capacity of India to produce iron in any quantity, and the excellence of the material, even as rudely manufactured by the natives, are facts that have long been known; yet no adequate measures have hitherto been taken to turn those resources to account, and the iron markets of Calcutta, Bombay, and Madras are still supplied from England and Sweden.

Iron has always been made, however, by the natives, and in the aggregate, to a very great extent; but the manufacture, as conducted by them on the small scale, and without machinery, skill, or capital, has not been attended with the profit or success of which, under efficient arrangements, it is susceptible. In the supply of the Indian market the iron made in the country must always have an advantage over that of Europe; while in the English market the Indian iron can be supplied of a quality and at a price to compete successfully with the Swedish and Russian.

Actuated by these consideration, a few gentlemen at Madras some time ago formed a company for the manufacture of iron and steel by European methods, from the rich iron ores of the south of India, the Government assisting them by pecuniary advances, and by extensive grants of privileges in respect to ore and fuel. In the endeavour to originate and establish this manufacture in a distant country, with new materials, and in a peculiar climate, many difficulties had to be overcome; but the company, within the last few years, have succeeded in manufacturing iron of a very superior quality, selling, both in England and India, at rates capable of yielding a great profit.

The capital hitherto employed, however, has not been adequate either to the full development of the undertaking as an investment, or to the increasing demand for the commodity. The urgent wants of India for iron of various purposes, including castings for bridges and other public works, and for the railways especially, have rendered it a matter of absolute necessity to supply iron from the country itself. The extent of the demand for railways alone may in some degree be estimated from an authenticated statement that, inclusive of cast-iron sleepers (which it is understood are likely to supersede the wooden sleepers), not less than 700 tons of iron, in various forms, will be required in the construction of every mile of double line, independent of the quantity required for maintenance.

Much of this iron is required in forms that will hardly admit of its shipment from this country, while it is certain that the existing shipping will not afford the means of transport for the portion admitting of shipment.

The subject has recently undergone the serious consideration of the Government, as well as of the parties connected with the railways, and the effective extension of the company's operations has been strongly urged, to meet the exigencies of this new state of things. The company have secured territories yielding ore and fuel to an extent that for all practical purposes may be termed inexhaustible. Their accessibility and quality are also such as to afford the materials for making the finest iron at the lowest cost. These properties comprise extensive tracts of mines and forests acquired from native landholders, with exclusive rights from the Madras Government of raising iron ores throughout all the provinces of that Presidency where the rich magnetic ores are found, and leases of the Government forests best situated for their purposes.

The company have two sets of works now in operation, one on either side of the Peninsula, at Beypore and Porto Novo, both most favourably situate on the coast, at the mouths of navigable rivers. Little addition is required to the buildings or machinery to adapt them to the extended scale of operations contemplated, and a large stock of ores and fuel is on the premises, and kept up by regular course of supply. All materials are delivered by contract, or purchased at the works and depôts. The ores lying in mass on the surface, no underground operations are required; whence the ordinary risks of mining enterprise are avoided; and the whole charge being merely that of the unskilled labour (in a country where it can be had, in any amount, at 2½d. a day), the cost of the materials of iron making is lower, probably, than in any part of the world. The company have, moreover, proved the sufficiency of native labour for all the processes of the manufacture, and have in their employment a considerable establishment of trained workmen.

Under these circumstances it is proposed to create a new company, with a capital sufficiently large to work the undertaking efficiently, and powers to extend its operations as future exigencies shall require.

It is calculated that on a sale of only 18,000 tons of iron and castings in the year, a profit of 14 per cent. on the whole capital can be realised, and the nett profit would be increased in a much larger proportion on an increased make, for which the means exist to any extent.

In the above calculation the most careful estimates of the cost of production, founded on 15 years' experience, have been taken into account. The selling price of the bar-iron has been taken at £8 8s., the average of the actual prices obtained for the last 10 years for English iron in the Indian markets, while the company's iron is, from the purity of its ores and the mode of its manufacture, much superior, and has hitherto realized on an average £12 per ton. The demand calculated on forms but a small part of that actually existing, wholly irrespective of all prospective increase as dependent on railways or other developments. The iron exported in the last year to India, from Liverpool and London alone, exceeded 55,000 tons, exclusive of any rails.

The reports, papers, and calculations on which the estimates of production and profits are based, have been submitted to Mr. Charles Manby, C.E., and to Mr. J. E. Coleman, accountant, who have satisfied themselves of their accuracy, and of the correctness of the results deduced from them.

The extent to which the introduction of railways will open a market for the company's produce it is difficult to estimate, but it must be very great in various ways. Of eventual profit from this source, no account has been taken in the estimates, which it has been the object to found only on established and ascertained data. For this reason, also, the profits from the manufacture of steel have been omitted, though from the known high quality of steel made from Indian iron, and the extraordinary facilities the company possess for its manufacture at a low cost, there can be no doubt of a large revenue being eventually derived from this source also.

The parties interested in the old company are prepared to convey to the new company their property, leases, and privileges, free from all debts and incumbrances, and working liabilities, up to a day to be agreed on, on the following terms of advantage to the new shareholders:—

1. That the capital of the new company shall be £400,000, divided into 40,000 shares of £10 each, 20,000 of such shares being denominated class A, or preference shares, and 20,000 class B, or shares entitled to a deferred dividend.
2. That the works, with all machinery, plant, and stock of ores and fuel, of the estimated value of £50,000, shall be paid for in cash.
3. That the forest and mineral property, and the leases, rights, and privileges granted by the East India Company to the present Iron Company, shall be represented by the sum of £200,000 in class B shares of the new company, which shall be entitled to dividend only as hereafter explained.
4. That the annual profits of the undertaking be applied as follows:—
   1. In payment of a dividend at the rate of 7 per cent. per annum on the amount for the time being called up on the preference or class A shares.
   2. In payment of a dividend to the holders of the class B shares at the rate of 7 per cent. per annum on the amount for the time being called up on the class A shares.
   3. Any excess after these payments to be equally divided between the two classes of shares.
5. That after any period of five years, during which an average dividend of 7 per cent. on the whole capital of £400,000 shall have been paid, all distinctions of shares shall cease, and the whole capital be entitled to dividend equally.

It is intended that the company shall be constituted by a Charter of Incorporation, or Act of Parliament, limiting the liability of the shareholders.

The Board of directors will be in London, with the assistance of a subordinate local board or agency at Madras.

The deposit to be paid on the allotment of the shares will be 1s. per share, being after the rate of 10s. per cent., the amount limited by the Act 7 and 8 Vic., cap. 110, which deposit, less any expenses incurred, will be returned to the shareholders in the event of arrangements not being made with the East India Company for establishing the undertaking on a satisfactory basis. It is not expected that the aggregate calls on the class A shares will exceed £5 per share during the first year.

A deed, embodying the provisions which the directors may consider proper for the regulation of the company, and for carring out the objects in view in the proposed or any modified form, will be prepared with the sanction of the directors; and if any shareholder shall fail to execute the same for one month after the publication of a notice in the *Times* newspaper, calling on the proprietors so to do, his shares, with the deposits paid thereon, will become forfeited to the use of the company.

Application for shares to be made in the annexed form, addressed to the secretary, o whom prospectuses may be obtained.

FORM OF APPLICATION FOR SHARES.

To the Directors of the "East Indian Iron Company."

Gentlemen,—Being desirous of becoming a subscriber in the above undertaking, I request that you will allot to me Class A Shares of Ten Pounds each therein, the whole of which, or any less number that may be allotted to me, I agree to accept, and on demand to pay the required deposit; I also undertake to execute the Deed of Settlement of the Company, to be prepared by the Directors, when called upon by advertisement in the *Times* newspaper; or, in the event of my failing to do so for one month after the publication of such advertisement, I agree that the shares allotted to me, with the deposits paid thereon, shall be forfeited to the use of the Company.

I am, Gentlemen, your obedient servant,

Date.....
Name (in full) .. ..
Address (in full) .. ..
Business or Profession.....
Reference .....

INVENTORS' AID ASSOCIATION—

(PROVISIONALLY REGISTERED).

Bankers.—Messrs. Spooner, Attwood, and Co., Gracechurch-street, London.

The capital of the Association to be raised by shares of £3 each.

Applications for the remaining shares to be made, accompanied with a reference, to the Secretary, at the offices of the Association, of whom also prospectuses and every information can be obtained.

The Secretary will be happy to wait upon any gentleman who may favour him with an interview, to explain the object and intentions of the Association.

The Committee are prepared to appoint Agents in the provincial towns, on application (with references) being made to the Secretary of the Association.

5, Beaufort-buildings, Strand. WILLIAM M. ROBERTSON, Secretary.

LAMPEN CONSOLS COPPER MINE,

IN THE PARISH OF ST. NEOT, CORNWALL.

Divided into 5000 shares.—Deposit £1 per share, which includes a call of 5s. per share for working expenses.

COMMITTEE.

HENRY ASHLEY, Esq., Windmill-street, Gravesend
FRED. REYNOLDS, Esq., 15, Old Broad-street, London
J. RICHARDSON, Esq., Eaton-street, Pimlico, London
WILLIAM WILSON, Esq., Richmond-road, Barnsbury

Bankers—Barclay, Bevan, and Co., Lombard-street, London
Devon and Cornwall Bank, Liskeard

Purser—E. Anson Crouch, Liskeard, of West Caradon
Managing Agent—Captain Henry Taylor, of West Caradon
Secretary—Mr. H. Peet, No. 48, Threadneedle-street, London

This mine is held under a lease at 1-20th dues, and extends about a square mile; there are several very promising lodes in this sett, which have been worked on for marquisite or white mundic, only to the depth of 26 fathoms, and which have produced such large quantities of that mineral that refining houses have been erected on the mine, and large quantities of metal extracted therefrom.

There is another engine-shaft sunk 36 fathoms deep, and levels driven east and west about 10 fathoms, from which it is confidently assumed, that large courses of copper ore will be found underneath the mundic, it being a general opinion among persons conversant with mining that mineral rides a good horse; and it is also anticipated that if silver could be extracted from this mundic some years ago, so as to give a profit to the adventurers—it will, in the present improved state of chemical knowledge, now be rendered a source of very considerable gain.

It is now proposed to clear up the shaft 36 fathoms, by the aid of a powerful water-wheel now on the mine, which is of sufficient power to sink the mine much deeper. The outlay of the former adventurers has been very considerable in sinking the shafts, driving levels, and erecting of buildings on the mine, the whole of which are available for bringing the mine into a rich and profitable state of working, and it is confidently expected that £1250 will be amply sufficient to bring the mine into a dividend-paying state.

West Cavadon, Feb. 24.—This sett is situated in the parish of St. Neot, Cornwall, and lies directly south of, and contiguous to the Wheal Caroline, formerly Wheal Mary Consols; it is bounded on the east by two setts, called Tin Hatches, and Wheal Noble. This sett possesses three lodes of an east and west bearing, which are parallel with the lodes in the fore-mentioned mine (Caroline). The stratum is a metalliferous clay-slate, at about one mile south of the granite. These lodes were wrought some years ago to a depth of 16 or 20 fathoms; and, although I cannot speak from personal knowledge of the prospects of this mine, as left by the former party, yet, being present when an old miner, called Treberth, who is now confined to his room through illness, and who is well acquainted with the mine, gave a favourable statement, and from what I have heard from others, I am led to conclude that the mine is worthy of being resumed, especially as it can be worked to advantage by a large and powerful wheel, which is fixed in a good position for forking the water; the expense of flat-rods, and a lift of pumps, would be comparatively little when compared with the advantages likely to accrue from properly opening the mine. ROBERT DUNSTAN.

Alternum, Nov. 3.—Lampen Consols' middle engine-shaft is 36 fathoms deep; the bottom level is extended about 10 fathoms east and west, the lode in this level is large and kindly; there is another shaft to the west of the engine-shaft, sunk to the depth of 26 fathoms; between these two shafts we had a good course of ore, from 2 to 3 feet wide, in the back of the 26 fathom level; we had also ore in the back of the 10 fathom level. We did not drive much in the levels, we sunk the shaft 10 fathoms, and took away several hundred tons of ore from the backs, both in the new and old workings; the quality of the ore from this lode, at least a great proportion of it, was very superior. The mine was drained by the aid of a water-wheel—the water in the mine was very easy. I would strongly recommend you to explore this middle lode; it is very promising, and has produced a great quantity of ore in proportion to the ground expended. W. TRENBERTH.

Application for shares to be made to Thomas Fuller and Co., 51, Threadneedle-street, London; J. Sims and Co., Tavistock; and H. Peet, secretary, 48, Threadneedle-street, London, where plans and specimens may be seen.

TRAFALGAR LIFE ASSURANCE ASSOCIATION.

OFFICES,—No. 40, PALL-MALL, LONDON.

This association has been established for the purpose of providing annuities to the share and policy holders in the event of pecuniary misfortune, incapacity, or old age; which are not liable to forfeiture in cases of bankruptcy, insolvency, or failure of any description—and also securing education, apprenticeship fees, or endowments to their children.—Detailed prospectuses, containing the names and addresses of the shareholders, rates of premium, an explanation of the system now originated, together with useful information and statistics respecting life assurance, may be had on application to the offices. Combination policies, payable in the event of casualties of any kind totally disabling the assured, or death, are issued at moderate rates. This important addition to the principle of assurance deserves the serious attention of persons in all positions of life. Immediate and deferred annuities are granted. All policies indisputable, whereby the power on the part of the office in resisting a claim under any circumstance whatever, is removed. Loans are effected on personal and other securities in connexion with life assurance.—Parties desirous of becoming agents or medical referees are requested to communicate with the secretary. By order of the Board,

THOMAS H. BAYLIS, Resident Manager and Secretary.

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BELLS of very superior quality (Stirling's Patent) are also SUPPLIED.

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of the ORIGINAL, and only real, SAFETY FUSE, beg to inform Merchants, Mine Agents, Railway Contractors, and all persons concerned in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE *has now a thread wrought into its centre*, which being patent right, infallibly *distinguishes it from all imitations*, and ensures the continuity of the gunpowder. The Safety Fuse is now protected by a Second Patent, and manufactured by greatly improved machinery. BICKFORD, SMITH, DAVEY, Camborne, Cornwall.

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FRANCIS AND H. J. MORTON,

10, NORTH JOHN-STREET, LIVERPOOL, and 9½, ALBION-STREET, LEEDS.

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KUPER & CO. request particular attention to their IMPROVED FLAT ROPES, and their very superior mode of stitching; also to their ROUND ROPES, for Inclines, &c., and PIT GUIDES or CONDUCTORS made of very thick wire, and in one length, without joints.

Prices, carriage free to the nearest railway or water station, 56s. per cwt. for round 70s. per cwt. for flat ropes; galvanising, 10s. per cwt. extra.

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10, NORTH JOHN-STREET, LIVERPOOL, and 9½, ALBION-STREET, LEEDS.

NEWALL v. WILKINS AND WEATHERLY.—This case

was tried on the 20th and 21st of February, before the Lord Chief Justice of the Court of Queen's Bench and a Special Jury.—The action was brought for INFRINGING Mr. NEWALL'S well-known PATENT for UNTWISTED WIRE ROPES. The Plaintiff obtained a verdict on all the issues raised, which has fully confirmed his Patent right.

Since this verdict was obtained, the Master of the Rolls has granted an INJUNCTION AGAINST the DEFENDANTS, to RESTRAIN them from MAKING these ROPES, or in any way infringing the Plaintiff's Patent.

This is to CAUTION all PERSONS AGAINST MAKING UNTWISTED WIRE ROPES, and AGAINST BUYING, SELLING, or USING such ROPES, unless made by Mr. Newall, and those to whom he has granted licenses.

Patent Wire Rope Works, Gateshead, Feb. 26, 1851.

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J. MURDOCH (successor and formerly assistant to the late Mr. Hebert, author of the "Engineers' and Mechanics' Encyclopædia") informs INVENTORS and PATENTEES that, at his OFFICE, they can INSPECT a CLASSIFIED LIST OF PATENTS (THE ONLY ONE EXTANT), showing at one view all the PATENTS that have been GRANTED for any particular object, whereby they may save much trouble and expense, and procure information not otherwise obtainable.

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or Meridian Instrument, is now ready for delivery.—Pamphlets containing a description and directions for its use 1s. each, but to customers gratis.

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Application personally, or by letter, to F. W. Campin and Co., No. 156, Strand (removed from 210), London.

GREAT BRYN CONSOLS COPPER AND TIN MINE,

In the parish of WITHEL, near ST. AUSTELL, CORNWALL.

ON THE COST-BOOK SYSTEM.

In 6500 shares.—Deposit £1, which includes a call of 10s. per share.

3500 shares have already been subscribed for, and the remaining 3000 will be issued to unexceptionable parties.

COMMITTEE.

WILLIAM CARREN, Esq., Wilton-place, Regent's-park
MALCOLM M'LEAN, Esq., 9, Bloomsbury-place, Bloomsbury-square, merchant
JOHN PARKER, Esq., Peckham, merchant.

Bankers—Messrs. Robins, Foster, and Co., St. Austell, Cornwall
Messrs. Williams, Deacon, and Co., Birchin-lane, London

Solicitor—William Mosson Kearns, Esq., 3, Bloomsbury-place

Purser—Mr. William Lelean, 5, Crosby Hall Chambers, Bishopsgate-street, London.

This Mine is situate in the parish of Withel, near St. Austell, in the county of Cornwall, and held under a lease of 21 years, from Messrs. Roberts and Knight, at 1-18th dues. The sett, which is of a considerable extent, east and west, contains about 300 acres of highly mineralised ground, in which has been discovered five very promising copper lodes, which are a continuation of the Bodmin Wheal Mary lodes, carrying mundic, green carbonates, spar, peach, gossan, and interspersed throughout with good stones of yellow, black, and grey ore. Parallel with those are several tin lodes of good promise, that have been only opened on the backs, but which will be cut at a lower depth by main adit. The lodes vary from 1 to 3 feet wide, and are embedded in a beautiful white and blue killas—a stratum congenial for the abundant production of minerals.

There are two elvan courses running through the sett, which forms a very important feature in the property, as, in every instance where they intersect the lodes, deposits of ore are invariably found. A considerable outlay has been made in driving the deep adit level, and cross-cutting to intersect the north lode—in doing which a fine pile of orey stuff has been raised. From the north lode some stones have been assayed, and found to produce 31½ per cent.

The amount subscribed per share is expected to erect the steam-engine, and will be sufficient for the profitable working of the mine; when this is done, if present indications are realised, the profits will meet all further required outlay for machinery, and thus render any further call unnecessary; but if this expectation should prove too sanguine, the calls will not exceed 5s. per share, and at intervals of at least three months between each call.

The present proprietors of the mine solicit the fullest inquiry and inspection. The annexed reports, from gentlemen whose experience and character are so well known and justly appreciated, places this adventure in a much more favourable position than mining operations can generally pretend to, and, consequently, the shareholders will be in a great measure free from the ordinary risks attending such investments. As a proof of the favourable opinion entertained of this undertaking, in the immediate neighbourhood of the mine 3500 shares are already subscribed for.

Applications for shares and prospectuses to be made at the offices of the Company, 5, Crosby-hall Chambers; to Messrs. T. Fuller and Co., 51, Threadneedle-street; to Mr. John Webb, jun., Lanivet, near Bodmin, Cornwall; to J. Sims and Co., Tavistock; to Messrs. Flint and Co., Hull; or to the solicitor of the company, W. M. Kearns, Esq., 3, Bloomsbury-place, Bloomsbury-square.

REPORTS.

Wheal Mary Consols, March 13.—According to your request, I have carefully inspected the Great Bryn Tin and Copper Mine. The first point of examination was a shallow level, driven south about 8 fathoms to intercept a copper lode, where a pile of stuff is on the surface; the above level is fallen in in places, so that I cannot report on the size of the lode, but the stuff broken from the lode is very fine gossan, well filled with green carbonate of copper. Another gossan is cut in some costeaning pits, about 15 fathoms south of the above copper lode, of very promising appearance; and the stratum in which these lodes are embedded is a light congenial killas. The next point of examination was the deep adit, and I observed in the open cutting the back of a large lode, composed of soft spar, peach, mundic, black and grey ore, and am of opinion it will be a very productive lode at a suitable depth. A cross-cut is driven to cut this lode about 10 fathoms further east, when there will be about 9 fathoms back. The cross-cut is set at 15s. per fathom. There are ancient workings on the south copper lode, and the heaps of stuff on the workings contain fine specimens of copper. There are about 75 fathoms of cross-cutting south from the present end of the main adit, to cut the lodes in the old workings. The ground is favourable for driving, and the stratum is much mineralised. On the whole, I consider, the mine with its many lodes of tin and copper, with other rare local advantages, a very promising undertaking, and I should like to have an interest in the concern. JOHN KERNICK.

Victoria, March 6.—When I inspected the mine I saw one very promising lode in the shallow adit, about 3 feet big, composed of fluor-spar, peach, gossan, mundic, black and grey ore; and there is another lode 15 fathoms south, cut in a shode pit of very promising character. I also discovered in the open cutting of the deep adit the back of a large lode, from 2 to 3 fathoms big, containing spar, peach, mundic, flookan, and large stones of black and grey ore, and it is my opinion this lode will make a quantity of mineral in depth. There is a cross-cut driving at this time to cut the lode further in the hill, but the lode is thrown north by a heave, or it would have been cut before this time, and I have not the least doubt, when cut, that it will contain a great quantity of mineral (copper). There are two other very promising lodes cut in the continuation further south, containing black and grey ore; also many more rich lodes of tin and copper in the south of this sett, and, it is my opinion, by driving deep adit levels to intersect all the lodes, and erecting a 50 cylinder steam-engine, Great Bryn will make a good, lasting, dividend-paying mine, as the stratum or killas is very congenial for mineral, and there are two beautiful white elvan courses running through the sett and crossing the lodes, and many other indications I have not here mentioned. JOSEPH WARRICK.

WHEAL TREWANE SILVER-LEAD, ST. KEW, CORNWALL.

Divided into 4224 shares,

1224 of which are retained by the present proprietors—the remaining 3000 shares will be issued to unexceptional parties at £2 each, which includes all calls up to the present time.

COMMITTEE.

WILLIAM CALDECOTT, Esq., Frating Lodge, Colchester.
JOHN PARLEY, Esq., Royal Crescent, Notting-hill.
JOHN BROWN, Esq., Hammersmith.
WILLIAM TAYLER, Esq., 9, Adelaide-place, London.

Bankers.—Commercial Bank, Lothbury.

Trustee—J. Mayhew, Esq., Coggeshall, Essex. *Purser*—Thomas Reid, jun.

This mine is situate in the parish of St. Kew, five miles from Camelford and Wadebridge, and two from Port Isaac, and in the proximity of the old Treburget Mine, from which, in the last few years of her working, more than £60,000 was paid to the adventurers. The mine is held under a lease for 21 years, at 1-15th dues. About £6000 have been expended in erecting a steam-engine, water-wheels, crusher, stamps, and sinking shafts, pitwork, driving levels, and laying out dressing-floors. The engine-shaft is down 30 fathoms; and levels driven from different points, the 9 fathom level has been driven north 30 fathoms, and the lode in this level has a most promising appearance, from which returns have been made. The lode in the present end is 1 foot wide; it is also driven south from the shaft 20 fathoms, and the lode averaging from 2½ to 3 feet wide, and from which some very rich lead ore has been raised. The 16 fathom level has also been extended both north and south, and the lode equally good.

The 20 fathom level has also been driven north from the shaft 60 fathoms, where for some distance the backs have been stoped away; it has also been extended 50 fathoms south, through a good lead lode, where there have been a few fathoms stoped away, but leaving a great quantity of backs to be worked.

The lode in the end being very much improved, and being composed of gossan, mundic, spar, and a good branch of lead.

The 30 fathom level has been driven north from the shaft 13 fathoms, the lode averaging 18 inches wide, and the ground very congenial for lead; the lode altogether of a most promising nature; the same level has been driven south 18 fathoms, and the lode 2 feet wide, of a most promising character.

A shaft is in course of sinking south, through a killas, similar to the killas in the Treburget Mine, by means of a 26-feet water-wheel. There are four lodes in the sett—the eastern lode is 4 feet wide, producing good stones of silver-lead.

The Wheal Sarah lode is a gossan lode, very rich for silver, containing, by analysis by Mr. Longmaid, 50 per cent. for lead, and 56 ounces of silver per ton of ore—several tons of which have been sold at £20 per ton. From the fair inspection of the gossan from this lode, the value of a ton of dressed ore may be stated at £11; and the quantity discovered from the present backs is about 2000 tons, which can be dressed down to 250 tons: this, at £11, would realise £2750; and if the gossan become more argentiferous, the value of each ton would be proportionably higher, and to this expectation we are led by the analysis of Mr. Longmaid.

The raising and dressing of this gossan can be done very cheap, and there can be no doubt that excellent results will ensue from its exploration.

The sett extends about three-quarters of a mile on the course of the lodes, and it is estimated that from £1000 to £2000 will be amply sufficient to make this a profitable and dividend-paying mine.

There is on the mine a smith's shop, account-house, bucking-house, steam-engine, water-wheel, crusher, whims, and every requisite for working the mine.

Extracts from Captains T. Richards and Jehu Hitchins, the highly-esteemed practical mining agent, and the elder brother of Mr. Josiah Hitchins, the celebrated discoverer of the adjoining mines. Mr. Jehu Hitchins has also consented to undertake the duties of managing agent of this mine, for which his great experience, sound judgment, and long-tried integrity, eminently qualify him:—

Captain Richards, who inspected the mine in October last, recommends at once to put down a trial shaft southward, to take the lode 10 or 15 fathoms deep, and run down on the course thereof, which would save time and expense. I would also recommend costeening, and lay open the backs of the other lodes and branches, and for such I mean, of course, costeaning; and the working of the mine judiciously carried out, in the way proposed, there is every probability the adventurers will be well remunerated for their outlay.

Mr. Jehu Hitchins, in his report of the 27th February, says:—The new shaft, south to the lode, which Capt. Sand says has been cut in the bottom 6 fathoms below the surface, I went down to see, and I broke some promising stones of lead, intermixed with beautiful spar, similar to those you will receive—this is a kindly channel of ground. I cannot say decidedly that this is the lode, as without a better insight of it, and its underlie, I would not venture an opinion; be it the lode, or be it what I would quite as soon, or rather, see it a branch leading into the lode, I think it a very favourable object. Too much expectation should not, as yet, be entertained of this particular discovery, although this, coupled with what I have been told of the appearance of the lode in the north part of the mine, in the 9, 20, and 30 fathom levels southward, confirmed by what I myself saw in the heaps of refuse from the lode, in the shape of gossan and lead ore, I should candidly and honestly say that your mine is well worthy a spirited trial.

Applications for prospectuses, and for the remaining shares, to be made to Mr. Thomas Moxon, stockbroker, 3, Austinfriars; Mr. C. E. Secretan, Stock Exchange; and Mr. Thomas Fuller, 51, Threadneedle-street, London, where plans and specimens of the ore may be seen, and every information obtained.

UNDER BRITISH AND FOREIGN LETTERS PATENT.

HUTCHISONISED STONE, BRICKS, &c.—TO LAND

PROPRIETORS, ENGINEERS, ARCHITECTS, &c.—The SOFTEST STONE, CHALK, GYPSUM, CLAY, SAND, &c., INDURATED AS HARD AS GRANITE, will never vegetate nor disintegrate, being impervious to atmospheric action, &c.

For all Foundations, external and internal Buildings, Docks and Sea Walls, Sewerage, Paving, Decorative and Monumental Works, the HUTCHISONISED MATERIALS are unequalled for durability and low cost.—*(See Testimonials and Prices.)*

PASTEBOARD, SOFT WOOD, and other ABSORBENT MATERIALS, rendered WATERPROOF, and imperishable from weather, vermin, &c.

LICENSES GRANTED ON LIBERAL TERMS.

Apply to Wm. HUTCHISON, Hutchisonised Stone Works, &c., Tunbridge Wells, Kent.

WOODMAN'S WELL AND BROADRIDGE CONSOLIDATED COPPER MINES.—NEAR LYDFORD, DEVON.

In 2048 shares.—Deposit £1 per share. 65

Prospectuses, and reports by Mr. Evan Hopkins and others, may be had on application to Mr. James Crofts, 4, King-street, Cheapside, London.

The Cost-book, it is at present intended, will be finally closed in 14 days, and the first General Meeting held, when the mine will be put to work.—Applications for the remaining shares will be received in the interval.

WEST TAMAR SILVER-LEAD MINING COMPANY, CORNWALL.

This mine is divided into 1024 shares, of which 524 will be disposed of at 30s. per share and to be conducted on the "Cost-book System."

Purser—Mr. John Wymond; | *Agent*—Capt. John Hambly. 66

Bankers—Hodge and Co.

This is a silver-lead mine, situated in the parish of Landulph, in the county of Cornwall, and adjoins that of the South Tamar Mine, under the River Tamar. The ore-floors, &c. will be on the bank of the Tamar, from which all the produce will be shipped, and supplies received; therefore, if the advantage of locality be taken into account, as compared with some mines, a large profit may fairly be calculated on, from the great saving in land carriage. This sett is about a half-a-mile north and south on the run of the lodes, and a mile east and west in duchy lands, and bounded by the best lead mines in Devon, South Tamar, from which they are returning 90 tons of rich ore per two months, and nearly the whole of it taken from the ends driving towards this mine; and the farther they drive south the richer the lode appears to be, running into this new mine, from which there is not the least doubt there will be, in a short time, large quantities of ore risen.

In this mine there is an adit being driven about 20 fms.; the lode is from 3 to 4 ft wide, with well-defined walls, composed of soft blue killas, and the lode is now producing some beautiful silver-lead near the surface. A small steam-engine will be required for effectually working the same.

This sett is held under the Duchy of Cornwall, by a letter of licence at 1-12th dues, with a promise of their being reduced when the lease is taken up.

It is the intention of the present proprietors to dispose of 524 shares (so that the parties coming in may have a majority), at 30s. per share, and that 20s. per share be paid to the present company, and 10s. be applied to the working of the mine.

A plan of the sett may be seen at Mr. John Wymond's office, Callington, the purser; Capt. Hambly, Calstock; or at Mr. John Gibson's, No. 9, Catherine-street, Devonport, to whom application for shares may be made.

No application will be received for less than four shares. The following reports have been received from the several mine agents whose names are attached thereto. Any parties wishing to become adventurers, will have every opportunity of inspecting the mine, as the proprietors court enquiry.

REPORTS.

West Tamar Mine, Feb. 28.—This mine is situate on the west side of, and abutting on, the River Tamar, in the parish of Landulph, and about eight miles from Plymouth. The sett is very extensive, a mile from east to west, and half-a-mile from north to south. There are great advantages in working this mine, as all materials and machinery may be imported, and the ore exported, without the expense of land carriage. There are three lodes in the sett, two of them are east and west courses, and one north and south. Of the two former but little can be said, as the work done on them is very limited; but I have been informed that stones of copper have been taken from one of these lodes, in draining one of the fields. The latter is evidently the South Tamar lode, which is well known to have yielded great quantities of silver-lead ore, and at the present time leaving a good profit to the adventurers. South Tamar Mine lies to the north of this sett—the River Tamar bears the division of the two setts. The present adventurers have driven a level 20 fms. on the course of this lode, which has been productive of rich stones of lead; in the present end the lode is from 3 to 4 feet wide, composed of flookan, spar, and mundic, intermixed with lead in such quantity as is seldom found so very near the surface. I believe this to be a very good sett, and can strongly recommend it; and, with regard to future working, I would advise the continuance of driving on the course of this lode as a head—there is a rise of ground from 35 to 40 fms. Those backs will be gained in driving from 150 to 200 fathoms, and at this point I believe this lode will prove productive, and if so this ground may be all taken away, and the mineral returned without machinery for pumping. This ground will not be expensive for working, as the present end is now in the course of driving for 15s. per fathom, and my decided opinion is that a small outlay will realise a profit to the adventurers. JOSEPH EDDY.

Calstock, March 21.—I have this day, according to your request, inspected the West Tamar Mine, in the parish of Landulph, in the county of Cornwall. The locality and situation are good, being near and adjoining the best silver-lead mines in the county of Devon. This sett is extensive, running north and south on the course of the lodes, and about a mile east and west. The lodes of the Tamar Consols Silver-Lead Mines, from which immense quantities of rich ores have been sold, and are still profitably working 200 fathoms below surface, are running direct into the west ground of this mine. This sett also adjoins the South Tamar Silver-Lead Mine, from which they are now making large returns of rich silver-lead ore. The same lode runs direct into the West Tamar Mine, on which I find you have driven an adit end in this mine about 20 fms., in a soft blue killas, most congenial for silver-lead; the lode is from 3 to 4 feet wide, well-defined walls, and producing good samples of ore near the surface, and strong indications of a rich lode below. A small engine should be erected near the river, and by sinking 20 fms., and exploring the lode north and south, I think I am justified in saying, from the locality and present appearance in the adit end, there can be no doubt but this will make a profitable and lasting mine. JOHN HAMBLY.

Wheal Langmead, March 27.—According to your request, I have inspected the West Tamar Mine sett. I find that the sett extends about half-a-mile on the course of the lode, and nearly a mile from the east to the western extremity. I have inspected the lode, which has been opened for about 20 fathoms by an adit opening in the cliff. I find it to be a very promising lode, about 4 feet wide, composed of flookan and gossan, strongly impregnated with silver-lead ore (with leaders of spar, also containing lead); but the adit, which is being driven, is gaining but little depth. I would, therefore, recommend that a shaft be sunk, and I have no doubt that, in about 10 or 12 fathoms depth, according to the very promising appearances of the end at present, a regular course of ore might be cut. Having had upwards of 50 years' experience in the South Tamar Mine (or Cowis), I can confidently assert that, according to appearances, this lode is a continuation of that which is now so profitable in the South Tamar, every indication bespeaking it to be as good a speculation in every point of view. B. ROBINS, Senior

WHEAL CARADON COPPER,—ST. CLEER, CORNWALL.

Divided into 5000 shares.—Deposit £1 per share,

2500 of which are retained by the present proprietors—the remaining 2500 will be issued to the public at £1 each, which includes a call of 5s. per share.

CONDUCTED ON THE COST-BOOK SYSTEM. Nov 67

COMMITTEE OF MANAGEMENT.

THOMAS TORKINGTON, Esq., Cygnet Cottage, Gravesend.
NATHANIEL IRON, Esq., 15, St. Dunstan's hill.
FREDERICK REYNOLDS, Esq., 15, Old Broad-street.

Bankers—Barclay, Bevan, & Co., Lombard-street; Devon & Cornwall Bank, Liskeard.
Purser—Edward Anson Crouch, of West Caradon, Liskeard.
Managing Agent—Capt. Henry Taylor, of West Caradon.

This mine is held by lease from Richard Doidge, Esq., at 1-14th dues, and is situated in the neighbourhood of Liskeard, on the eastern slope of the Caradon Hills, near the village of Caradon, and near to the well-known South and West Caradon, and other rich and dividend-paying mines, and immediately adjoining Tokenbury. There are several lodes running through this sett; the principal one is the same as the main lode in South Caradon, being a continuation of it, the workings of which are at no great distance. The direction and contents of the lodes in both mines are in favour of its indentity as one lode, from which some fine stones of copper ore have been taken.

The sett of Wheal Caradon consists of the estate of South Yeoland and part of Tokenbury, as far south and including the new G lode

The main lode of this mine was worked a few years since, by the adventurers of the neighbouring mine of Tokenbury. When this mine was suspended the working of Yeoland Consols was necessarily stopped also: since that time the name of Yeoland Consols has been adopted for a mine in Devonshire, and it is, therefore, proposed to call the Cornish mine Wheal Caradon. Although 50 fathoms was reached by means of the pressure-engine, only one part of the lode was cut at that depth, and no cross-cuts were extended either at that or the 30 fathom level. One branch of the main lode has been driven on west towards Caradon Hill, and is a most promising lode, 2 feet wide. It is proposed to cut this south branch of the main lode, and if there is not power sufficient to sink and drive on it, and cut a large lode not seen under adit, and only a few fathoms distant, then to apply for the aid of Tokenbury steam-engine, from which rods to Wheal Caradon can easily be taken. The discovery of ore in granite, at Phœnix, to the east of Caradon Hill, increases the prospects and certain success of Wheal Caradon.

This company will commence operations under peculiarly advantageous circumstances, as all the machinery and materials requisite for the future workings are already on the mine, and which can be immediately set to work; the present proprietors being willing to dispose of one-half their interest, at £1 per share. This sum, after providing for all expenses hitherto incurred, as purchase of machinery, materials, &c., now on the mine, at work already done, which has cost from £3000 to £4000, will leave an available amount of £1250 for working capital, which is considered amply sufficient to bring the mine into a profitable and dividend-paying state, which this company will necessarily derive the advantage of, both with regard to time and money.

Looking at the relative position of this mine, and keeping in view the several promising lodes running through it, more particularly that of the main lode of South Caradon, which greatly enhance the value of this property, and from the appearance of the lodes in the present levels, and from other indications, which are precisely the same character as South and West Caradon, there can be no hesitation in saying that this mine is likely to prove equally as productive and profitable to the adventurers.

Application for the remaining shares to be made to Thomas Fuller and Co., 51, Threadneedle-street, London; and J. Sims and Co., Tavistock (one part being reserved for the old adventurers); and prospectuses, with all particulars, and specimens seen.

REPORTS.

March 22.—This mine is situated on the eastern side of the Caradon Hill, near the junction and granite of killas, in the parish of Linkinhorne, in the county of Cornwall. The north lodes in this sett are supposed to be a continuation of the north lodes of West and South Caradon; but our main lode (G lode) appears, by continuing part of the way and dialling the remainder, to be a continuation of the main lode of South Caradon. A shaft has been sunk to the depth of 50 fms. by the aid of a pressure-engine, which was found insufficient to drain the mine in the summer part of the year, consequently the progress must have been slow. There are several lodes discovered in this sett, but only one wrought on to any extent, which is a well-defined regular lode, varying from 1 to 3 ft. in width, composed of quartz, peach, mundic, and spotted with ore. As there is not sufficient surface water to drain the mine with the pressure-engine, I would recommend that an arrangement be made with Tokenbury adventurers for you to attach rods to their steam-engine to drain the mine, and cut the other lodes, which may be done at a comparatively small outlay. On the whole, I consider this speculation well worthy a further trial; and as the north lodes in this sett may now be intersected at a fair depth, I think you may reasonably expect to find some good bunches of ore. HENRY TAYLOR.

Linkinhorne, March 22.—The adit level in this mine, Wheal Caradon, is driven north about 100 fathoms. I believe there are two or three lodes cut in its course north. There are lodes north of the present adit level that have never been cut under the surface. There has not been anything done on any lode except the G lode, which has been driven on at the adit 100 fathoms; a shaft is sunk to the north of this lode, which intersected it in the 30 fathom level, which was driven on east and west about 50 fathoms each way—the shaft was again sunk to the 50 fathom level, and a cross-cut driven north, which meeting with a branch, mistaking it for the lode, it was driven on several fathoms; but finding it did not continue its size, cross-cuts were again driven north, where the main lode was discovered. I worked on G lode, in the 50 fathom level at this mine, which was a very kindly lode, and its character precisely the same as South Caradon, composed of spar, peach, mundic, spotted with copper ore. CHARLES TRELEASE.

CRAIG DDU SLATE COMPANY,—FESTINIOG, MERIONETHSHIRE, NORTH WALES.

(*Completely Registered.*) 68

In 6000 shares.—Deposit £1 12s. 6d. per share.

OFFICES (temporary)—No. 1, PINNER'S-COURT, OLD BROAD-STREET.

This Quarry is now in limited operation, and several thousand pounds worth of Slates and Slabs have been sold at a large average profit on the make; the Slate Bed is very extensive, the Metal of fine quality, realising the best prices. To carry out the works more extensively, it is now proposed to issue the reserved 2800 shares.

According to Mr. Evan Hopkins' report, the first year of slate-making will realise a dividend of about 7s. per share; the second year 17s. per share; and the third year £1 5s. per share; and afterwards may be gradually augmented to any required degree of productiveness and profit.

Application for shares (deposit £1 12s. 6d.) may be made to Charles Edwards, Esq., stock and share broker, 18, Throgmorton-street, London, and Stock Exchange; or to Frederick Farrer, Esq., Doctors'-commons; of whom may be had prospectuses, forms of application, and reports of Capt. William Williams and Evan Hopkins, Esq.

N.B. In consequence of the number of applications the list will only remain open for a few days.

OKEL TOR SILVER-LEAD AND COPPER MINE,—

In the parish of CALSTOCK, CORNWALL, adjoining the celebrated Tamar Consols and South and East Tamar Mines.

In 2048 shares.—Deposit 10s. per share. 69

COMMITTEE OF MANAGEMENT.

JOHN BAYLEY, Esq., Plymouth. | JOSEPH OTTON, Esq., Exeter.
H. A. HARVEY, Esq., Bideford. | WM. CHANNING, Esq., Exeter.
R. W. PAWLEY, Esq., Plymouth. | JAMES GILLARD, Esq., Plymouth.

Superintendent of Mining Operations—E. Hopkins, Esq., F.G.S., 13, Austinfriars, London
Purser—Mr. William Channing, 7, South-street, Exeter.
Managing Agent—Captain W. B. Collom.
Bankers—Devon and Cornwall Banking Company, Plymouth.
Secretary—Mr. J. Jury, Exeter.

OFFICES,—No. 3, CASTLE-TERRACE, EXETER.

This MINE is situate in the parish of CALSTOCK, by the side of the navigable River Tamar, and adjoining the celebrated and profitable Tamar Consols, and South and East Tamar Mines, whose riches are too well-known to need comment. The silver-lead ore discovered at a shallow depth, are of an exceeding rich description, producing at least 37 ounces of silver to the ton.

The great cross course of Devon Great Consols, running throughout this sett, is stated and relied on, by all practical men who have inspected it, to make as great a mine for lead as the Devon Great Consols is for copper. At this point we beg to draw your particular attention to Mr. E. Hopkins' report—himself and all parties agreeing this is the best unwrought piece of ground in Devon or Cornwall.

In fact, since he inspected the mine, a new discovery has been made, by cutting a lode 4 feet wide, only 10 ft. east of the engine-shaft, composed of prian, sugary-spar, and lead, of a beautiful description.

An adit level has been driven north from the river, on the course of the lead lode, for 50 fathoms, and a shaft has been communicated to the adit level, and another sunk 10 fms. below the adit and the lode intersected, composed of lead, prian, sugary-spar, horn-spar, and flookan; the water from the lode prevented more being done until an engine is erected. A smith's shop, office, and material house have been already built, and an excellent quay erected, at which vessels of 200 tons can load or discharge all materials necessary for the mine, as well as deliver the coal required for the engine, at a saving of nearly one-half: this is another important feature in favour of the adventurers. A new engine-shaft has also been commenced, 11 feet long by 7 feet wide, within the timber, and sunk 13 fathoms.

The extent of the sett is about a mile on the course of the lodes, and held from the Duchy of Cornwall at 1-15th dues, and no surface rent is payable, nor compensation for surface damages.

There are already 1024 shares in the hands of the original adventurers, which are reserved free up to £6 per share. For the purpose, therefore, of reimbursing the sum of £1000, the cost of sett, and to meet the necessary expenses of carrying on the works of the mine, it is now proposed to issue the remaining 1024 shares, on which calls, if required, will be made up to £6 per share, independent of the deposit, which will pay for preliminary expenses, and the balance carried to the account for working the mine; and in the event of any further outlay being necessary, calls will be made rateably on the whole 2048 shares.

Few investments like the present are offered to the public in shape of mining, for it is mere than confidently expected that only £4 per share will be required, for the erection of a steam-engine, and to put the shaft down to the requisite depth, before riches of an extraordinary description will be developed, to enable a dividend to be declared. Such are the not too sanguine expectations of the present holders.

Parties desirous of making further inquiries as to the value of this property, are requested to address Evan Hopkins, Esq., 13, Austinfriars, London, who will be happy to furnish every information required.

There are upwards of 300 shares already subscribed for by the most respectable parties in Exeter; and application for the remainder can only be made, with references, to Mr. James Crofts, 4, King-street, Cheapside, London; Messrs. Sims and Co., Tavistock; the Purser, 7, South-street, Exeter; or the Secretary, at the office of the company, 3, Castle-terrace, Exeter, where prospectuses may be obtained, together with a map of the mine.

Sept. 12.—This mineral property is situated to the east of Calstock village, in a narrow neck or loop of ground in the winding of the River Tamar, as shown in the sketch. The rock, within the limits of the sett, is composed of clay-slate, dipping to the south; it is intersected by the copper lodes of the district, showing very good gossan, running more or less east and west, and by north and south lead lodes.

The most important feature in this ground is the lead lodes, and more particularly the one in which an adit has been driven 50 fathoms in extent. The rock appears highly metaliferous, and presenting all the ordinary indications for the production of bunches of lead ore in depth. A considerable quantity of copper ore may be found near the intersection, at deeper levels, but the prospects are principally confined to lead. I think, from the structure of the rock and other geological indications, the main bunch of lead ore will be found under the southern slope, and more particularly under the river, and south, dipping in that direction.

In order to do justice to this property, it will be necessary to erect a powerful engine, not less than 60-horse power, near the mouth of the present adit, and sink at once to the 50 fathom level. According to the present favourable appearance in the adit, a very good bunch of ore will be discovered at this depth.

I believe it will be necessary, in the course of time, to sink diagonally in the direction of the shoot of ore, south, similar to the plan they have adopted at the Tamar Mines; however, this question may be left until the workings are sunk to the 50 fathom level. The copper lodes, to the extent of their productiveness, near the intersections, will at the same time be developed.

The composition of the lode is exceedingly favourable for lead ore in the southern slope. There is, doubtless, a hard bar of unproductive ground to the north: be this as it may, I think, with a good steady management, and a system of working judiciously laid down and followed up, this may be rendered a very good mine, and more especially if the marshes to the south can be obtained. EVAN HOPKINS.

N.B.—The marshes referred to in Mr. Hopkins' report have since been added to the sett.

Stowe's Cottage, March 28.—In compliance with your request, I have very carefully inspected the Okel Tor sett, and find it extensive; the greater part of which is in the parish of Calstock, situated on the south side and joining the Tamar River, the bed of which, for a considerable length, with a piece of ground on the Devonshire side, is also embraced in the limits; the stratum is a mineralised clay-slate.

An adit level has been driven north from the river, 50 fathoms on the course of a lead lode, the bearing of which is near north and south, underlaying east about 9 inches in a fathom; the lode, for the length driven on is large, composed chiefly of gossan, quartz, flookan, mundic, and prian, with a small quantity of silver-lead ores intermixed. So far as the lode is opened on, the indications presented are such as to justify the expectation that it will be found productive when laid open to a reasonable depth; but I am fully persuaded that the most valuable part will be found between the tail of the adit and the south boundary.

Three lodes have been intersected in the adit, the bearing of which is about 15° south of east and north of west, underlay south about 3 feet in a fathom: these lodes are large, and composed of gossan, quartz, and mundic, with spots of yellow copper ore. Judging from the indications presented, and the favourable nature of the strata, I believe these lodes will be found to contain large deposits of copper ores in the ground north of the lead lode. A new engine-shaft is in course of sinking, and is down 3 fathoms below the adit; the ground in which is very favourable, and can be sunk at a fast rate if a full pare of men were employed; I would, therefore, recommend you at once to prosecute the sinking of the present shaft by a full number of men, and get a steam engine-erected as soon as possible, considering the indications sufficiently encouraging to warrant the outlay of capital to give the mine an effectual trial. SAMUEL SECCOMBE, Phœnix Mine.

FORM OF APPLICATION FOR SHARES.

SIR,—I request you will allot to me shares in "Okel Tor Silver-Lead and Copper Mine," which I agree to accept, and to pay the deposit thereon of 10s. per share, on your duly sending me the transfer for execution. I am, &c.

THE WANDLE WATER AND SEWERAGE COMPANY,

For the SUPPLY of the METROPOLITAN DISTRICTS SOUTH of the THAMES AT CONSTANT AND HIGH SERVICE.

Capital £300,000, in 30,000 shares, of £10 each.—Deposit 12s. 6d. per share, 70

Of which 7s. will be returned in the event of an Act not being obtained in the present Session of Parliament.

The Bill before Parliament has passed the Second Reading.

TRUSTEES.

JOSEPH SOMES, Esq., of Blackwall, shipowner
GEORGE STONE, Esq., of Lombard-street, banker
Chairman—JOHN MACGREGOR, Esq., M.P.
Deputy-Chairman—CHARLES REYNOLDS, Esq.

DIRECTORS.

SAMUEL WHITFIELD DAUKES, Esq., 14, Whitehall-place
EDWARD ESDAILE, Esq., City Saw Mills, Regent's Canal
JOHN LAURENCE, Esq., H.E.I.C.S., 15, Regent-street
JOHN MACGREGOR, Esq., M.P., 1, Princes-terrace, Hyde-park
CHARLES REYNOLDS, Esq., Wallington Lodge, Carshalton, Surrey
THOMAS ROBINSON, Esq., Bernard street, Russell-square
JOHN PENRY WILLIAMS, Esq., York-street, St. James's-square, and Abercamlais, Brecon
THOMAS WILSON, Esq., York-terrace, Queen's-road, Peckham, Surrey.

Engineer and Surveyor—F. P. Thompson, Esq., Waterworks' Chambers, Orange-street, Trafalgar-square.
Consulting Engineer—Messrs. Easton and Amos, Grove, Southwark.
Bankers—Messrs. Martin, Stone, and Martins, Lombard-street.
Secretary—William Holloway, Esq., 15, Tokenhouse-yard, Lothbury, City.
Solicitors—Messrs. Mullens and Paddison.

The objects of this Company are chiefly to supply the inhabitants south of the Thames with a cheap, abundant, and constant supply of pure and wholesome water; and to improve, by a complete and independent system of sewerage, the sanitary condition of its inhabitants—thereby removing an acknowledged cause of the cholera, which, during the late severe epidemic visitation, proved so generally fatal.

After payment of the deposit no call will be made, unless an Act be obtained in the present session of Parliament; and, in the event of the Act not being then obtained, 7s. per share will be returned to the shareholders.

Applications for shares to be made, until the 19th of April inst., to Messrs. Sheppard and Sons, 28, Threadneedle-street, City, where the plans may be seen, and detailed information obtained; and also to the Secretary, at the offices of the company, 16, Tokenhouse yard, Lothbury.

DOLANGWYN SLATE QUARRY, NEAR ABERDOVEY, NORTH WALES,

TO CAPITALISTS AND OTHERS SEEKING INVESTMENT. 71

A fine SLATE PROPERTY, in NORTH WALES, now presents itself to the notice of the public; it is only 7 miles distant from a shipping port (Aberdovey), with a good turnpike-road the whole way—at which port the Slate and Slab can be shipped at a moderate freight, either for London or Liverpool.

The joints in the Quarry are very good, and the metal (a bright blue, and free from spots) is equal to any produced in the Principality.

The extent of the vein is about three-quarters of a mile in length, by an average width of from 20 to 30 yards; and, from the favourable position and inclination of the vein, it can be opened and wrought at a comparatively small outlay. The fall for refuse is all that can be wished for, and the space ample for centuries.

There is water-power sufficient for all purposes of machinery within about 250 yards of the Quarry, to which an incline can be made at a trifling expense.

It is proposed to put this property into 4000 shares, at £5 each. The allotment of shares will take place in the early part of the next month (April). A deposit of £1 10s. per share will be required upon allotment, and no call to be made at a less interval than three months, and then only of 10s. per share, with the full consent of a majority of a general meeting, to be called for that purpose.

A General Meeting will be called within 14 days after the allotment of the shares, when trustees and a managing committee will be chosen from amongst the shareholders present.

Applications for shares (not less than five), prospectuses, &c., to be made to the Secretary, at the offices of the Union Mining Company, 6, Austinfriars, London.

CHARLES WHEATCROFT, Secretary.

NORTH TAMAR CONSOLS SILVER-LEAD AND COPPER MINING COMPANY,—BEERFERRIS, DEVON.

Divided in 2000 shares.—Dues 1-15th.

CONDUCTED ON THE COST-BOOK SYSTEM. 72

COMMITTEE *pro tem.*

W. RONALD, Esq., Forbes, Aberdeen.
W. BUDDEN, Esq., Winchester.
Mr. JOSIAH SIMS, Tavistock.
Captain T. SPRAGUE, Tamar Silver-Lead Mines, Beerferris.

Purser—Mr. W. A. Palmer, Tavistock | *Agent*—Capt. John Hambly, Calstock.
Bankers—Devon and Cornwall Banking Company, Tavistock.

This is a SILVER-LEAD and COPPER MINE, from which rich silver-lead ore has been raised, which sold for £35 per ton, and was rich for silver, and the undertaking offers no ordinary attraction as a valuable investment to capitalists and others, being situate in the best mining neigbourhood in the county of Devon, and adjoining the celebrated Tamar Silver-Lead Mines, from which thousands of tons of silver-lead have been raised, and whose agents, together with others, have inspected and spoken very highly of the concern; and it is believed that only a small outlay will be required to bring the mine into a profitable working, and pay dividends to the adventurers.

Application for the remaining shares to be made immediately to Messrs. Josiah Sims and Co., mining agents, Tavistock, Devon, from whom reports and every information can be obtained.

PENCRAIG LEAD MINING COMPANY.—

APPLICATIONS for the REMAINING SHARES in this Company having now nearly reached the number under offer, a MEETING OF THE COMMITTEE will be held at the Wynnstay Arms Hotel, Oswestry, on Thursday, the 24th day of April inst., for the purpose of ALLOTMENT OF SHARES, at which meeting a day will be fixed for a General Meeting of Proprietors, to arrange and confirm the constitution of the Company

In the meantime, applications for the remaining shares will be received by the secretary, Bell Williams, Esq., at the office of the company, 16, Castle-street, Liverpool. 73

PENCRAIG LEAD MINING COMPANY, LLANRWST, NORTH WALES.—Divided into 1500 shares, at £8 per share.

CONDUCTED ON THE COST-BOOK SYSTEM. 74

COMMITTEE OF MANAGEMENT.

EDWARD WYNNE THOMAS, Esq., Oswestry—*Chairman.*
EDWARD MORRIS, Esq., Mayor of Oswestry.
JOHN ROBERTS, Esq.
THOMAS MINSHULL, Esq., solicitor, Oswestry.
Mr. RICHARD EVANS, Oswestry.

Purser—E. W. Thomas, Esq. | *Secretary*—Bell Williams, Esq.
Local Manager—Mr. Robert Roberts.
Bankers—The North and South Wales Bank.

Payment to be made as follows—viz.: £2 on allotment, of which £1 forms the working capital, and £2 on each succeeding month.

OFFICES OF THE COMPANY,—No. 16, CASTLE-STREET, LIVERPOOL.

With a view more fully to DEVELOPE the resources of this well-known MINERAL DISTRICT, an arrangement has been entered into with the original proprietors of these mines to have them worked by means of an influential Public Company. The present proprietors to receive for their interest in the mine (being the cost of purchase and the value of machinery, material, &c.) the sum of £10,500*l.*, of which £8000 is taken in shares in the new undertaking—thus at once taking up 1000 shares, leaving £1500 as a reserved fund; of this £500 is deemed sufficient to carry out all the works suggested in Captain Davey's report, and develope a large extent of minerals on these lands, proved to be intersected, as shown upon the plans and sections, with several valuable lead lodes—one only of which is now worked, and from which, at the present shallow depth of 32 yards, near £2000 worth of ore has been sold, in working comparatively but a short time. This vein has been well proved by two levels and a shaft on its course. On the lowest level the improvement is very decided, from whence much the largest portion of the produce has been obtained. No lead has yet been wrought downward on this level—thus leaving many thousand pounds worth of ore in sight.

These trials have induced the original proprietors to continue sinking on the engine-shaft; it is now sinking through the vein, at 9 fathoms under the lowest level; the ore here fully bears out the expected improvement in depth, and justifies the confidence of finding a large and valuable deposit there.

The present water-power machinery, as will be seen by the report, is sufficient to accomplish all the contemplated works for draining the mine, crushing and dressing the ores—leaving the steam-engine on the works in reserve.

Applications for the remaining shares to be made to the secretary, Mr. Bell Williams, 16, Castle-street, Liverpool, from whom plans and prospectuses can be obtained.

FORM OF APPLICATION.

SIR,—I request you to allot me shares in the "Pencraig Lead Mining Company," or any less number that you can allot me; and I hereby agree to pay the amount of call on such shares.

Name in full.....
Address.....
Dated this day of 1851. Occupation .....

REPORT OF CAPT. GEORGE DAVEY.

To the Proprietors of the Pencraig Lead Mines.

Llanrwst, March 6.—Having forwarded you a section of the mine workings, with remarks on the machinery, depths of the shafts, driving of the lodes, &c.; also showing a proposed line for a new adit level, to be commenced about 50 yards down the stream, south-west of the present boundary line, or extreme extent of land granted to the Company by George Davies, Esq., who, after seeing the plans and walking over the ground, consented to the proposal, provided the land was preserved from any further encroachments than was allowed, agreed on, and specified in the lease of the mine.

When this level is complete, the whole of the water will be discharged through the same depth of 32 yards from the top of No. 1 shaft, instead of being pumped, as at present, near the surface, or within two yards of the said top of the shaft. There will also be 40 yards fall for a pressure engine, from the higher pool to the 32 yards level, which will perform duty, raising water from the mine, and using 50 gallons of water per minute to what the wheel now requires 400 gallons—being eight times the effective power as at present, sufficient to work for several years, and likely 100 yards deeper on all the lodes connected with the shafts Nos. 1 and 2.

The principal workings have been on what is called on the plans the north lode, as lettered on the line of the run—therefore, nearly east and west directions, which I consider to be the main or leading lode in the mine. The lodes vary in width from 6 to 18 inches, but this lode is 2 feet wide in some places. In working the backs there is sufficient room for miners to work without breaking the walls on either side.

There is another lode parallel to this, which may be traced from the plantation north of the farm-house at Pencraig to the eastern boundary of the sett, on which there are old workings, as noticed on the map.

The distinction of north and south lodes must only be known from No. 1 westward, as, from the intersection which takes place near No. 1, it is reversed. From No. 1 shaft the 32 yards level is driven 30 yards south-west on the south lode, as lettered on the line crossing the higher pool—15 yds. of which have been productive, as may be observed on the section running from north-east to south-west.

There is also another parallel lode, more to the north, which is to be seen in the river above Pencraig House, the direction of which, by tracing or dialling, must be within a few yards east of the said No. 2 shaft. The Frith lode also crosses the field to the west of No. 2 shaft, in a direction running from south-east to north-west.

There are also two cross-courses, one almost to the extreme east part of the sett, from the range of old workings near the boundary south of the house by Llanrwst-road, has been producing from time to time large returns of ores. The other parallel cross-course is to be seen by the lower pool, and crosses the road, west of the boundary of the sett, but can trace no workings thereon. There is also a large range of elvan running through the sett on which No. 2 shaft is sunk—marked with a green shade on the plan.

I find that ores raised by the miners working on the lode, for the last twelve months, amounted to about 160 tons, selling for £2000, done with sixteen men, besides the expenses of washing, &c.

Labour cost for the year, say	£ 800	0	0
Lord's dues	200	0	0
Leaving a clear profit of	1000	0	0
Total	£ 2000	0	0

I consider this part worked is below the average returns of what may reasonably be expected from the future operations. After the completion of the level, having five good lodes intersecting each other so near the No. 2 shaft, from the present favourable appearances, we may calculate that 100 men may be set to work on the different lodes upon similar terms, and very probably at a lower scale, as the ores improve in depth—making a better produce, with less sulphur, and reduced charges in the washing and dressing.

You have the advantage of a good road for the cartage of ores to Trefrew, 3 miles, for shipping, with every convenience for the dressing, also a crushing apparatus attached to the wheel. As the mine can be worked so very economically in the pumping, &c., having such good opportunities for application of water-power, and opening a level at a moderate expense, my opinion is, that it will turn out a very profitable concern.—Hoping it will give entire satisfaction to the spirited adventurers, I remain, &c.,

GEORGE DAVEY.

P.S.—Many great and good mines have been discovered in similar valleys—two of the most productive and profitable in Great Britain, now working, may be named in the number—viz., Great Devon Consols (or Wheal Maria) Copper Mine, Devonshire, and East Wheal Rose Silver-Lead Mine, Cornwall.

FREEDOM FROM COUGHS IN TEN MINUTES after use

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PRICES OF MINING SHARES.

It being difficult to obtain a correct knowledge of all the mines in our list, we trust that agents, and others interested, will assist us, by forwarding any additions, or corrections, with which they may be acquainted—our object being to present it as accurate as possible. We have also added a column to note the actual business transacted; but which, without the constant assistance of brokers and agents, cannot become so complete as we could wish. The desirability of such a record is generally admitted, and we invite the co-operation of all parties concerned, in rendering it perfect.

DEVON DISTRICT.

Shares.	DEVON DISTRICT.	Paid.	Last Price.	Present Price
3000	Aylesborough (tin), Sheepstor	1¼	1¾	
4000	Bedford United (copper), Tavistock	2¾	8¼ 8¾	8 8½
1280	Birch Tor and Vitifer (tin), Dartmoor	10½	4	
1024	Bottle Hill (copper) Plympton	1	1 1½	
1024	Boringdon Park (silver-lead), Plympton	1	5¼ 5¾	
5000	Devon Consols North	2½	—	5
1024	Devon and Courtenay Consols (copper)	1½	2 2½	2¼ 2½
1024	Devon Great Consols (copper), Tavistock	1	305	307½ 310
768	Devon Great Tincroft, North Bovey	½	6	
250	East Birch Tor (tin), North Bovey	3	3	
2048	East Boringdon Park	½	—	
2048	East Crowndale (tin), Tavistock	7½	3	3
4000	East Gunnis Lake Junction (copper)	½	1 1½	2
9000	East Tamar Consols (silver-lead)	1½	1½	1
2048	East Wheal George (cop.), Walkhampton	1	10	10
512	East Wheal Josiah (copper), Tavistock	1½	1¼	1
4000	East Wheal Russell (copper), Tavistock	¾	5¾ 5¾ 6	
1024	Exmoor Eliza (copper), South Molton	4½	3¼ 1½ 2¼ 3	
6000	Forest (copper and silver-lead), Devon	1½	1 1½	
1500	Hennock (silver-lead), Hennock	2½	3	3
1024	Kingsett and Bedford (lead and copper)	3¾	2½	
1742	Lamherooe Wheal Maria (copper & tin)	11½	10	10
6000	Nap Down (silver-lead), Combmartin	1	1½	
5000	New Copper Bottom (copper) Bridestowe	1½	1¼	1½
2048	New East Crowndale (copper and tin)	1	1	¾
2000	North Tamar Consols (silver-lead & cop.)	—	1½	1 1¼
1024	North Wh. Robert (copper), Walkhampton	2	2	1½ 2
512	Old Brimpts (tin), Lydford, near Ashburton	¾	12	
1000	Peter Tavy and Mary Tavy (copper)	3½	6½ 7½	7½ 8
512	Plymouth Wheal Yeoland (tin), Plymouth	6½	6	
2048	Runnaford Coombe (tin)	3	3½ 4	
256	South Friendship Wh. Ann (copper & tin)	30	28 30	
256	South Molton (lead)	12½	8	
1024	South Plain Wood (copper), Ashburton	3¾	7	
9000	South Tamar (silver-lead), Beer Ferris	1	2½	2½
9600	Tamar Consols (silver-lead), Beeralston	4	4½ 4¾	5½
687	Tavy Consols (copper), near Tavistock	8	2¼	2½
1024	United Mines (copper and tin), Tavistock	10	10	
1024	West Downs (copper and tin), Whitchurch	2	1½	
1024	West Wheal Friendship (copper)	3	4	4½
4000	West Wheal Russell	½	¾ ½	½
1070	Wheal Adams (lead), Christow, Exeter	13¾	16	
1024	Wh. Carpenter (lead & cop.) S. Sydenham	1	2	2
1024	Wheal Crebor (copper), Tavistock	2½	8	8
1024	Wheal Emily (antimony and lead)	3	5 6	
1024	Wheal Fortescue (copper), Tavistock	5	1½	1½
764	Wheal Franco (copper), near Tavistock	13½	11	10½ 11
126	Wheal Friendship (copper)	120	120	
1024	Wheal Hamlyn, near Oakhampton		1½	
2048	Wheal Harris (lead), near Tavistock	¾	1	1½
2000	Wheal Langmaid (lead)	½	¾	1½ 1
1024	Wheal Mary Ann (copper), Bridestow	—	2	
1024	Wheal Mary Emma, Tavistock	1½	2¾	
210	Wheal Prospect	4	7	
5000	Wheal Providence, South Sydenham	½	2½ 4	
4000	Wheal Russell (copper), Tavistock	1¼	1½	1½

EAST CORNWALL DISTRICT.

Shares.	EAST CORNWALL DISTRICT.	Paid.	Last Price.	Present Price.
1024	Appledore (silver-lead and cop.) St. Ives	1½	3	3½
3450	Bawden (silver-lead)	½	½ ¾	
256	Berriow (copper), Liskeard	2½	3 3½	
1024	Bodmin Consols (lead), Wadebridge	4	5	5¾ 5
5000	Bodmin Moor Consols (tin and copper)	1	4½ 4¾	
1024	Bodmin Wheal Mary (copper)	7	11 12	
256	Brewer (copper), Gwennap	—	—	7½ 8
107	Budnick Consols (tin), Perranzabuloe	52½	9	
812	Butterdon (lead), Menheniott	2½	6	5½
1000	Callington (lead and copper), Callington	28	6½ 7½	
4000	Calstock United (copper)	5	6	
1000	Camborne Consols (copper), Camborne	7	8	
1168	Caradon Great Cons. (cop.), Linkinhorne	7	3	
1536	Caradon Vale (copper and lead), St. Ive	2¾	1¾	
1000	Carn Brea (copper and tin), Illogan	15	125 127½	
3000	Carthew Consols (cop. & lead), Wadebridge	4	7	
1056	Carvannall (copper), Gwennap	2¾	5	
2000	Cassandra Anne (lead & cop.), Stoke Clim.	5	12	
256	Chyprase, St. Enoder, Cornwall	3	25 30	
500	Comblawn (lead), Callington	8	—	
128	Comfort (copper), Gwennap	65	70 75	63
256	Condurrow (copper and tin), Camborne	20	110 112½	112
1000	Copper Bottom (copper), Crowan	7	7½	
211	Craddock Moor (copper), St. Cleer	28½	7	
256	Crane and Bejawsa (copper), Camborne	20	34	34
180	Dolcoath (copper and tin), Camborne	252	17	
2560	Drake Walls (tin and copper), Calstock	6½	4½ 4¾	5
1536	Duke of Cornwall (copper), St. Winnon	1	2	
256	East Basset (copper) Redruth	—	20	19 20
1024	East Buller (copper), near Redruth	3	6	
128	East Carn Brea (copper), Redruth	4	3	
1024	East Polgooth (tin)	6	5	
128	East Pool (tin and copper), Pool, Illogan	24½	155	
256	East Seton and Wheal Maude, Redruth	4	2½	
1024	East Sharp Tor (copper)	5	8	
256	East Tolgus (copper), Redruth	4	13	12
1000	East Trescoll (tin), Lanivet, near Bodmin	1	2½	
256	East Tywarnhayle (copper), St. Agnes	11	11	10½
94	East Wheal Crofty (copper), Illogan	125	150 160	
256	East Wheal Frances (copper), Illogan	2½	3	2
512	East Wheal Leisure (copper)	8	17	
256	East Wheal Rashleigh, Lonreath	—	10	
128	East Wheal Rose (silver-lead), Newlyn	50	560	
404	Fowey Consols (copper), Tywardreath	40	30	
2560	Garras (silver-lead), near Truro	5½	4½	
256	Gonamena (copper), St. Cleer	46	15	
243	Grambler and St. Aubyn (copper)	80	47	47
96	Great Consols (copper), Gwennap	1000	250	
11000	Great Polgooth (tin), St. Austell	2	2¾ 3½	
1024	Great Sheba Consols (tin and copper)	5	10	10
5000	Great Wheal Martha (cop.), Stoke Clims.	—	1	
3072	Great Wheal Mitchell Cons. (cop.), Lanivet	3	5	
1026	Gustavus Mines (copper), Camborne	6½	5½	5½
512	Gt. Wh. Rough Tor Con. (cop.), Camelford	29	20	
1024	Hawkmoor (cop.), Calstock, Gunnis Lake	5	8	
6000	Heignston Down Con. (copper), Calstock	2½	2	2½
512	Herodsfoot (lead), near Liskeard	16	14½ 15½	16 16½
1000	Holmbush (lead and copper), Callington.	24	22½ 23½	24
252	Lanarth Consols (copper), Gwennap	10	8	
6000	Marke Valley (copper), Caradon	10	3½	
256	Mineral Court (tin), near St. Austell	25½	15	
1024	Moditonham & Marrabro' (copper & lead)	1½	2½ 3	
320	Nansegollan (tin and copper), Camborne	3	3	5
1024	North Buller (copper), Redruth	4	13 14	
256	North Fowey Consols	—	25	
100	North Pool (copper and tin), Pool	45	500 510	
140	North Roskear (copper), Camborne	10	160	
256	North Tolgus (copper), Redruth	9	17½	20½
256	North Trefusis (tin and copper), Redruth	1	1	
6000	North Wheal Basset (copper and tin)	2	12 15	
1200	North Wh. Buller, or Gt. South Tolgus	6	14	
262	North Wheal Leisure, Perranzabuloe	1½	1½	
2048	Okel Tor (lead)	½	4½	
128	Par Consols (copper), St. Blazey	55¾	650	
1026	Pendarves Consols (copper), Camborne	3½	6	
1000	Pendarves and St. Aubyn (tin and copper)	5	10 12	
2048	Pentire Glaze (silver-lead), St. Minver	5½	8	
1160	Perran St. George (copper and tin)	21½	45	
200	Phœnix (copper and tin), Linkinghorne	—	240	
1000	Polberro (tin), St. Agnes	15	—	
2000	Polgear (copper and tin)	1	3	
5000	Rocks and Treverbyn (tin), St. Austell	4½	5 5½	
10000	Silver Valley & Wh. Brothers (cop. & tin)	1	1½	1½
256	South Caradon (copper), St. Cleer	30	119	119
2000	South Carn Brea (copper), Illogan	10	8½	10
1100	South Dolcoath (copper), Illogan	6	6	
256	South Tolgus (copper), Redruth	16	158 160	160
256	South Trelawny (lead), near Liskeard	33½	1½	
256	South Wheal Basset (copper), Illogan	10½	400	400
248	South Wheal Frances (copper), Illogan	80	297½	
256	South Wheal Josiah (copper), Calstock	2	3	3
999	St. Minver Consols (silver-lead)	1	6	
1000	Stray Park and Camborne Vean (copper)	15	15 16	
6000	Tincroft (copper and tin), near Pool	7	6½ 7½	6½
128	Tokenbury (copper), St. Ive, Liskeard	8½	7 7½	
1200	Tolcarne (tin and copper), Camborne	8	5	3½
2048	Trebell Consols (tin and copper), Llanivet	1½	1½	
256	Tregorden (silver-lead) Wadebridge	10	7	
256	Trehane (silver-lead), Menheniot	1½	13	14½
6000	Treleigh Consols (copper), Redruth	6	2¾ 3½	
1024	Tremar (copper), Liskeard	1	1½	1½ 1¾
2000	Trenance (copper), Helston	6	—	
96	Tresavean (copper), Gwennap	20	228	
120	Trethellan (copper), Gwennap	5	20 21	18
512	Trethevy (copper), St. Cleer	8½	6	5½
512	Treville (lead), Lewanick	2¾	9	
120	Treviskey and Barrier (copper)	180	200 210 225	215 210
500	Tywarnhayle (cop.), Illogan & St. Agnes.	70	30 40	31½
200	United Mines (copper), Gwennap	300	100	
5000	Warleggan Consols (copper)	¾	¾ 1 1½	
500	West Basset	—	9	
128	West Buller (copper), Redruth	10	1200	
256	West Caradon (copper), Liskeard	20	117½	117½

Shares.	EAST CORNWALL—Continued.	Paid.	Last Price.	Present Price.
512	West Fowey Con. (tin & cop.), St. Blazey	40	60	
1024	West Par Consols (copper), St. Blazey	10	11	
1024	West Phœnix, Linkinghorne	3	4	
2500	West Polgooth (tin), St. Ewe & St. Mewan	5	3	
260	West Seton (copper), Camborne	67	128	
3000	West Shepherd (silver-lead and copper)	2½	2	
940	West Tolgus (copper), Illogan	13½	4½	
120	West Trethellan (copper), Gwennap	15	20	
512	West Wheal Frances (copper), Illogan	7	22 23	23
3725	West Wheal Jewel (tin and copper)	12	½ ¾	
2048	West Wheal Rose (lead), Newlyn	2½	3	
500	West Wheal Towan (copper), Illogan	15	15	13
300	Wheal Arthur (lead), near East Wh. Rose	17	49	
1228	Wheal Arthur (silver-lead&cop.), Calstock	1½	5	11½
1000	Wheal Agar (copper), Illogan	6	5¼ 5½	
5000	Wheal Caradon (copper), St. Cleer	1	—	1
—	Wheal Cubit	—	—	5
3000	Wheal Dora (tin and copper), St. Cleer	3¾	4½ 4½	6
182	Wheal Elizabeth (copper), Redruth	19	18	
182	Wheal Ennis (lead), St. Erme	12	20	
100	Wheal Friendly (tin), St. Agnes	70	65	
4000	Wheal Golden (lead), Peranzabuloe	2	5½ 6½	
2560	Wheal Harriet (copper), Camborne	1	1½ 1½	1½
216	Wheal Henry (copper), Kea, near Truro	25	8	
6000	Wheal Langford (copper and silver-lead)	½	3	
1024	Wheal May (silver-lead and copper)	2	2½	2½ 3
990	Wheal Mary (copper), Redruth	15½	7½	
512	Wheal Mary Ann (lead), Menheniot	5¾	65 60 62	60½ 61
3000	Wheal Penhale (lead and copper)	2¾	5½	
128	Wheal Plenty (copper), Redruth	19	38 39	
128	Wheal Pollard (copper), St. Cleer	15¾	—	
256	Wheal Prudence (copper), St. Agnes	2	5½	5½
198	Wheal Seton (tin and copper), Camborne	107	210	
512	Wheal Sophia (silver-lead), Lezant	7	7	
2000	Wheal Tom (tin & copper), Stoke Clims.	5	9½ 10½	9½ 10
512	Wheal Trefusis (copper), Gwennap	7½	18 20	16 17 19
4224	Wheal Trewane (silver-lead), St. Kew	1½	1½	2½
3300	Wheal Trescoll (tin), Lanivet, Bodmin	2¾	2	
520	Wheal Trelawny (silver-lead), Liskeard.	3½	55	54½
256	Wheal Tremaine (copper), St. Ervan	11	2½	
267	Wheal Tryphena (tin and copper)	40	18½	
126	Wheal Union (copper), Redruth	40	45 50	
1024	Wheal Uny (tin and copper)	2	5 5½	
1024	Wheal Venton (silver-lead), Liskeard	3¾	7½	7 7½
1000	Wheal Vincent (tin), Alternum	7½	6½	
128	Wheal Violet (tin and cop.), St. Stephens	5	3	
128	Wheal Vlow, Perranzabuloe	3	5	

WEST CORNWALL DISTRICT.

Shares.	WEST CORNWALL DISTRICT.	Paid.	Last Price.	Present Price.
5120	Alfred Consols (copper), Hayle	3	17 18 19	18½ 19
1624	Balleswidden (tin), St. Just	9	10½	
940	Balnoon Consols (tin), Uny Lelant	—	4½ 5	
40	Bolowall and Nanpean (tin), St. Just	—	20	
128	Boscean (tin), St. Just	10	18 20	
600	Bosorn (tin), St. Just	5	½	
100	Botallack (tin and copper), St. Just	182	215 220	
1000	Carbona (tin and copper), Crowan	5	8	
2510	Cook's Kitchen (copper and tin), Illogan	15½	8½ 8½	
128	Drift Moor (tin), Sancreed	1	1	
1024	East Balleswidden (tin), Sancreed	1½	2½	
256	East Godolphin (copper), Crowan	17½	21	
1000	East Wheal Reeth	¾	1½ 2	
1024	East Wheal Margaret (tin and copper)	½	1½ 1½	
2500	Georgia Consols (tin), St. Ive's	2½	7 7½	
1024	Great Wheal Alfred, St. Erth and Phillack	3	3½ 4	3½ 3¾
512	Great Wheal Baddern (tin and silver-lead)	20	85	
512	Hawke's Point (copper), Uny Lelant	7	3½	
1024	La Min (Gwinear), tin and copper	2½	5	
256	Lelant Consols (tin), Uny Lelant	57	20	22
160	Levant (copper and tin), St. Just	—	175	
1000	Lewis (tin and copper), St. Erth	17	22 23 20	21½ 22½
1024	Mill Pool (tin and copper), St. Hilary	1	5	
2000	North Levant (tin and copper), St. Just	5	3	
1024	Penzance Consols (tin), Sancreed	1¼	3½	
1024	Praed Consols, Towednack	1	1	
560	Providence Mines (tin), Uny Lelant	20½	30	
1024	Sidney Godolphin (copper), Breage	2½	1¾ 2	2¾
300	South Speed (copper and tin), Uny Lelant	15	30	
1024	Spearne Consols (tin), St. Just	1¼	12½ 12 12¾	
1024	St. Aubyn and Grylls (copper and tin)	2½	4	
94	St. Ives Consols (tin), St. Ive's	80	80	
280	Spearne Moor (copper), St. Just	30	40	
1024	Trannack and Bosence, St. Erth	1	10	
1024	Trannack United Mines (tin and copper)	1½	5 5½	
512	Trebarvah, Perranuthnoe	1	5	
600	Trelyon Consols (tin), St. Ive's	4	8½	
604	Trowan Consols (tin), Towedneck	7	—	
100	Trumpet Consols (tin), near Helston	95	80 90	
1024	Wellington (copper & tin), Perranuthnoe	6½	11½	8 10
1024	West Alfred Consols	5¾	21 23	23
1024	West Ding-Dong (tin)	¾	3	
512	West Providence (tin), St. Erth	10	78 80	82
1024	West Wheal Treasury (copper), Gwinear	8	8	
1024	West Wheal Virgin (tin), Sancreed	1½	2½ 2	
256	Wheal Albert (copper)	10	28 29	
3072	Wheal Augusta (tin), St. Just	½	3 3½	
120	Wheal Bal (tin), St. Just	10	26	
256	Wheal Carpenter (tin), Gwinear	1½	2	6
1000	Wheal Guskis (tin and copper), St. Hillary	½	1½	
1000	Wheal Lemon, Germoe	13s	1	
112	Wheal Margaret (tin), Uny Lelant	79	170	
1024	Wheal Neptune (copper), Perranuthnoe	1	1 1½	
1080	Wheal Oak, near Helston	1½	1½	
40	Wheal Owles, St. Just	—	200	
240	Wheal Reeth (tin), Uny Lelant	20½	105	
1024	Wheal Squire (copper), St. Erth	1½	1½	1¾
1000	Wheal Susan, Breage and Crowan	1	2½	
1024	Wheal Tremayne (tin and cop.), Gwinear	9½	20 22½ 21	23
1024	Wheal Trelusback, Stythians	5	5 5½	

WALES.

Shares.	WALES.	Paid.	Last Price.	Present Price.
1248	Allt-y-Crib (silver-lead), Talybont	5	10	
1500	Bishopstone (silver-lead), Glamorganshire	2½	10	
8000	Blaenavon (iron)	50	1½	12½
10000	British Iron, New, regis. (iron)	12	8	
—	Ditto ditto, scrip	10	10	
2000	Bronfloyd (lead)	—	4	
2400	Bryn-Arian (lead), Cardiganshire	2	2½	2½
1000	Bryntail, Llanidloes, Montgomeryshire	2½	17	17
2000	Bwlch Consols (silver-lead), Cardiganshire	4	4 4½	
1000	Cae-Gynon (silver-lead), Cardiganshire	½	4¾	
20000	Cameron's Steam Coal (coal), Swansea	10	2 2½	
200	Cefn Bruno (lead), Cardiganshire	6	55	
2500	Cefn Gwyn (silver-lead), Cardigan	2	2½ 2¾	
900	Court Grange (silver-lead), Cardiganshire	10	12	
1600	Craig-y-Mwyn (lead), Llanrhiadr, Mont.	8½	10½	
1000	Cwm Daren	1	3	
1000	Cwm Erfin (lead), Cardiganshire	6	5 6	
2000	Cwm Sebon	—	4	
128	Cwmystwith (lead), Cardiganshire	60	105	
3000	Dalrhiew (copper and lead)	1½	10	
1000	Daren (silver-lead), Cardiganshire	2	7	
3000	Dyfngwm (lead)	10	11½ 12	
150	East Daren (lead), Cardiganshire	17	60 62½	
1280	Esgair Llee Llanfihangel-y-Croythin	4½	5½ 6	5½
1024	Freidd Llwydd Mines (lead)	1½	3½	
5000	Garreg (lead), Flint	—	2½	1½ 2
1000	Gelli-rei-vin (silver-lead), Cardiganshire	1	5	
100	Goginan (lead), Cardiganshire	5	200	
2000	Great Cowarch (silver-lead), Merioneth	2	—	
6000	Growa Slate Company, Camelford	5	5	
100	Lisburne (lead), Cardiganshire	75	720	
1000	Llwynmalees (lead), Cardiganshire	9½	8	
3600	Llynvi Iron (iron)	50	50	
5000	Merllyn (lead), Flint	2½	4	4
2000	Molland	—	3 3½	
1024	Montgomery (lead and copper)	7½	11½	12
200	Nanteos (lead), Cardiganshire	34	30	
3000	Nant-y-Car (copper), near Rhayader	—	5 5½	
4934	Pennant and Craigwen (lead)	3	3	
1000	Penralt	3	4½ 5	
1000	Pen-y-bank and Erglodd (lead)	4	6½	
2500	Rhoswydol and Bacheiddon (lead)	10½	—	
10000	Rhymney Iron (iron), Rhymney	50	12	
10000	Ditto New	7	3	
2048	Snowdon (copper), Carnarvonshire	3	—	
2000	South Wales Mining Company (lead)	1	1½	
1000	Tyllwyd (lead), Cardiganshire	2	2½	
4000	Tyn-y-Worglod (slate), near Carnarvon	4	4 5	
2048	West Goginan (silver-lead), Cardiganshire	1¾	3½	3½
1020	West Nantymwyn	—	2	1

MISCELLANEOUS.

Shares.	MISCELLANEOUS.	Paid.	Last Price.	Present Price.
905	Barristown (lead), Carrick	5¾	—	
32	Black Burn, Alston, Cumberland	15	100	
3000	Cally (copper and lead), Kirkcudbrightsh.	1	1½	
1024	Carn Galver	—	¾	
5000	Black Craig (lead), Kirkcudbrightshire	5	5	
7100	Derwent (silver-lead), Durham	10	3	
1000	Dhurode (copper) Ireland	2	5	
3750	General Mining Co. for Ireland (copper)	1¾	5¾	
32	Helvellin Mining Company, Westmoreland	15	25	
10000	Hibernian (copper) Ireland	12½	1¾	
1900	Keswick (lead), Portinscale, near Keswick	11	2 3	
786	Kirkcudbrightshire (lead), Kirkcud.	9¾	5 5½	
5000	Low's Patent Copper Company	7	10	
6000	Mendip Hills (lead), near Bristol	3¾	2¾ 3	3
20000	Mining Co. of Ireland (copper, &c.)	7	4¾	
2000	South of Scotland	—	1	
1500	Trecault (lime quarries)	2½	—	
1024	Weston (lead), Cherbury, Shropshire	¾	½	
5200	Wicklow (copper), Wicklow	5	19	19¾ 19½

FOREIGN MINES.

Shares.	FOREIGN MINES.	Paid.	Present Price
5000	Alten Mining Company (copper), Norway	14½	3
12000	Annotto Bay Mining Association (copper), Jamaica	1	5½ 6
15000	Asturian Mining Company (coal, iron, &c.), Spain	15	—
20000	Australian (copper), South Australia	4	2½ 2
6000	Barossa Range (copper), South Australia	1¾	¾
10000	Brazilian Imperial (gold), Brazil	23	4½ 5 4¾
12000	Cobre Copper Company (copper), Cuba	40	37½ 37½
10000	Copiapo Mining Company (copper), Chili	14	6¾ 7 7½ ¾
20000	General Mining Association (iron & coal), Nova Scotia	20	14
3250	Kinzigthal Mining Association (silver), Germany	2½	¾
12000	Liguanea and General Mining Company of Jamaica	1	3¾
5000	Linares (lead), Spain	3	2½ 2¾
4500	Ditto Additional	1	1½
500	Ditto Preference	3	—
20000	Mexican and South American (copper), Mexico	9	3½
5051	Mexican Company (silver), Mexico	59½	—
5000	National Brazilian (gold), Brazil	30	1½ 2 1¾ 1½
104000	North British Australasian (copper), S. A. & New Zea.	1	½
7000	Royal Santiago (copper), Cuba	10	7½ 8 7½
11000	St. John del Rey (gold), Brazil	15	15½ [illegible]
43174	United Mexican (silver), Mexico ... Av.	28½	[illegible]
10000	Worthing (copper), Adelaide, South Australia	3	2¾ 2½

New Patents.

SPECIFICATION ENROLLED DURING THE PAST WEEK.

J. P. P. AMBENGER, of Paris, civil engineer: For certain improvements in the application of magnetic power for moving and stopping carriages, for giving adherence to wheels upon rails, and also for transmitting motion.—1. The patentee proposes the application of what he terms electro-brakes (electro-magnets with their poles either in contact with the rails, or suspended above them, and capable of being lowered at pleasure), to effect the stoppage of railway carriages. These brakes may be attached to any number of a train of carriages, and connected in the same circuit, so as to be brought into action simultaneously.—2. Adherence between the rails and wheels of carriages is obtained either by electro-magnets attached to the carriages, and exerting their attractive force on the rails, or by direct contact of electro-magnets with the rails, the tyres of the wheels being the electro-magnets.—3. In order to apply the transmission of magnetic power to giving motion to trains, the patentee connects the wheels of each of the carriages together by cranked rods, to which are attached electro-magnets at suitable distances above the rails. The magnets come into operation intermittently and alternately, and the consequent rising and falling of the connecting rods cause the wheels to rotate and propel the carriages.

Claims.—1. The application of magnetic power to brakes upon railways.—2. The application of magnetic power to give adhesion to wheels of carriages on rails.—3. The employment of iron filings (in making the electro-magnets) to increase the surface of contact.—4. The application of magnetic power to moving carriages as described.—5. The application and use of the said magnetic power as a motive-power, as described.

LIST OF PATENTS GRANTED DURING THE PAST WEEK.

C. Cross, of Farnworth, near Bolton, Lancaster, cotton spinner and manufacturer, for certain improvements in the manufacture of textile fabrics, and in the manufacture of wearing apparel from textile materials.

J. G. Appold, of Finsbury-square, gentleman, for improvements in machinery for regulating and ascertaining the labour performed by manual or other power.

C. M'Dowall, of Hide-street, Bloomsbury, Middlesex, watchmaker, for certain improvements in the construction of time-keepers.

W. Barker, of Hulme, near Manchester, millwright, for improvements in machinery for chipping, rasping, and shaving dyewood, and other materials, and in apparatus connected therewith.

DESIGNS FOR ARTICLES OF UTILITY REGISTERED.

J. Wodderspoon, Portugal-street, sectional strengthening account-book and index band.
G. Stephens, Brownlow-street, Drury-lane, compound elliptic spring.
Hodges and Son, Dublin, safety tea-kettle.
R. Brown, Edinburgh, torch and valve for lighting road signals and other lamps on railways.

PROVISIONAL REGISTRATIONS.

T. Holland, South Audley-street, boiler cock.
J. Gedge, South Wellington-street, Strand, close joints for water, gas, or other pipes.
M. Roch, South-street, Finsbury, letter envelope.
E. Hill and Co., Dudley, expanding horse hoe.
M. Mason, Newcastle-under-Lyne, "the Crighton."
J. Brady, Blackfriars-road, safety riding-belt.
E. R. Turner and Co., Ipswich, feed-regulator for steam-boilers.
J. Hazelton, Salisbury-street, Lisson-grove, safety screw cork.
A. S. Stocker, Wandsworth, metallic embossed casket.
E. A. Baker, Whitechapel-road, gun-lock.
R. C. Mansell, Ashford, tyres for railway and other wheels.
W. Collimore, Whitechapel-road, traveller's indispensable.
J. R. Isaac, Liverpool, manifold stand.
J. A. Deveria, Calthorpe-street, beacon advertiser.
J. Adcock, Shalden, Teignmouth, comparative scale of the diameter and quadrant of a circle.—*Mechanics' Magazine.*

ACCIDENTS.

St. Agnes.—Isaac Cock and John James were severely injured by a fall of ground in Polberrow Mine—the latter will be a cripple for life. The former might have saved himself, but with that unselfish heroism peculiar to the miner, he rushed in while the earth was still falling, to save his comrade, and only shared his fate.

Budnick Consols.—John Pill was severely injured here by a fall of roof.

Durham.—C. Bambrough, nine years old, was run over by a waggon, and killed, at the Alexdrina Colliery.

South Hetton.—W. Hunter, a pitman, was killed here by a waggon passing over him.

Dudley.—J. Weaver, who was engaged to hook on the skips at the bottom of a pit, in Mr. Crewe's Baptist-end Colliery, laid hold of one as it was ascending, and was carried half way up, when, being unable to continue his hold, he fell, and was killed.

— W. Cox was killed by a fall of limestone, which occurred while preparing a blast, at Mr. Giles's works.

Sedgley.—W. Scragg was killed by a fall of roof at Mr. Whitehouse's Prior-field Colliery.

Kingswinford.—John Hadgetts was killed by a fall of coal at the Stabling Colliery.

Aberdare.—R. Thomas was killed by a fall of stone in one of the Clynmill pits.

J. James was killed in one of the Dowlais coal-pits.

Wigan.—J. Smethurst was killed at the Lower Patricroft Colliery.

Bury.—J. Duckworth fell down a stone quarry, and was killed.

COAL MARKET, LONDON.

PRICE OF COALS PER TON AT THE CLOSE OF THE MARKET.

MONDAY.—Carr's Hartley 14—Chester Main 13—Davison's West Hartley 14 3—Dean's Primrose 12—Howard's West Hartley Netherton 14 3—Heaton Hartley 13—New Tanfield 13 6—Ravensworth West Hartley 14—South Peareth 11 6—Tanfield Moor 13 9—Tanfield Moor Butes 13 6—Walker Primrose 11 6—West Wylam 13—Wylam 13 6—Wall's-End Brown 13—Bell and Brown 13 9—Gosforth 13 9—Heaton 14—Hedley 14—Hilda 13—Lawson 13—Riddell 13 6—Walker 13 9—Eden Main 14 9—Lambton Primrose 14 9—Bell 14 6—Belmont 14 6—Hetton 15 9—Haswell 15 9—Lambton 15 6—Lumley 14 3—North Hetton Lyons 14 6—Pensher 14 9—Richmond 14 9—Russell's Hetton 15 3—Scarborough 14 3—Stewart's 15 9—Whitwell 14—Hartlepool 15 9—Heugh Hall 14 9—Kelloe 15 6—South Kelloe 14 9—West Kelloe 14—Whitworth 12 6—Adelaide Tees 15—Backhouse 14—Maclean's Tees 13 3—Seymour Tees 13 6—South Durham 14—Tees 15 6—West Cornforth 13 3—Cowpen Hartley 14 3—Derwentwater Hartley 14 3—Hartley 13 6—Llangennech 20—Sidney's Hartley 14 3.—Ships at market, 241; sold, 97.

WEDNESDAY.—Buddle's West Hartley 14—Carr's Hartley 14—North Percy Hartley 13—New Tanfield 13—South Peareth 11 6—Tanfield Moor 13 9—Tanfield Moor Butes 13 3—Walker Primrose 11 6—West Wylam 13—Wylam 13 6—Wall's-End Brown 13—Gosforth 13 9—Harton 13 9—Hilda 13 3—Lawson 13—Northumberland 13—Riddell 13 6—Walker 13 9—Eden Main 14 9—Lambton Primrose 14 9—Braddyll 15 3—Hetton 15 9—Haswell 15 9—Kepier Grange 15—Lambton 15 6—Lumley 14 3—Pensher 14 6—Richmund 14 6—Russell's Hetton 15 3—Scarborough 14 3—Stewart's 15 9—Hartlepool 15 9—Heugh Hall 14 6—Kelloe 15 6—South Kelloe 14 6—West Kelloe 14 9—Whitworth 12 6—Maclean's Tees 13 3—Seymour Tees 13 6—Tees 15 6—West Cornforth 13 6—Cowpen Hartley 14 3—Derwentwater Hartley 14 3—Hartley 13 6—Sidney's Hartley 14 3.—Ships at market, 192; sold, 83.

FRIDAY.—Buddle's West Hartley 14—Carr's Hartley 14—Hedley's Hartley 13—New Tanfield 13—Howard's West Hartley Netherton 14—Longridge's West Hartley 14—South Peareth 11 6—Tanfield Moor Bute's 13—West Wylam 12 9—Wylam 13 6.—Wall's End Acorn Close 14—Brown 12 9—Eden 14 3—Gosforth 14—Harton 14—Hebburn 14 3—Hedley 14 3—Riddell 13 9—Walker 13 9—Eden Main 14 9—Lambton Primrose 14 9—Braddyll 15 3—Hetton 15 9—Haswell 15 9—Lambton 15 6—Richmund 14 6—Russell's Hetton 15 3—Scarborough 14 3—Stewart's 15 9—Whitwell 14—Caradoc 14 9—Heugh Hall 14 9—Kelloe 15 6—South Kelloe 14 6—Thornley 14 9—West Kelloe 14—Whitworth 12 6—Backhouse 14—Maclean's Tees 13 6—Seymour Tees 13 6—South Durham 14—Tees 15 6—West Cornforth 13 9—Hartley 13 6—Sidney's Hartley 14 3—Tanfield Moor 13 9—Ships at market, 162; sold, 76.

Delivery of coals, &c., in the port of London during the month of March:—

		Ships		Tons
Newcastle		351		110,120
Sunderland		116		34,515
Seaham		127		32,333
Stockton, Middlesbro', &c.		260		68,419
Blyth		28		6,859
Scotch		9		1,173
Welsh		30		7,537
Yorkshire, &c.		9		611
Small coal		3		719
Culm		2		418
Cinders		4		203
Total		939		262,907
Imported in March, 1850—Coal, culm, and cinders				238,094

Inland coals brought by canal, in the month of Feb., 1851, upon which the City's and other dues were received .... Tons 1304½

Inland coals brought by railway, the City's and other dues upon which were paid into the Chamber in the month of March, 1851 .... 4181½

Comparative Statement of 1850 and 1851.

	Ships		
Imported from January 1 to March 31, 1850	2644	766,974	tons.
Imported from January 1 to March 31, 1851	2600	734,324	"
Decrease in the present year	44	32,650	"

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